

### Use Attainability Analysis

for

WBID 3097 Ditch #6

Submitted by MEC/ERC

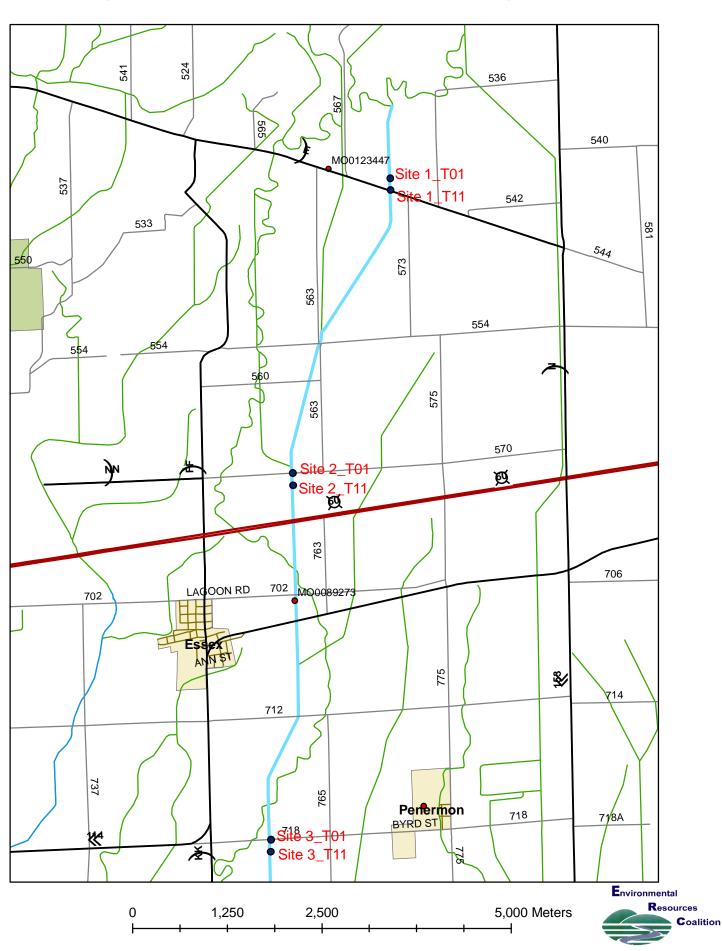
To Missouri Department of Natural Resources Water Protection Program

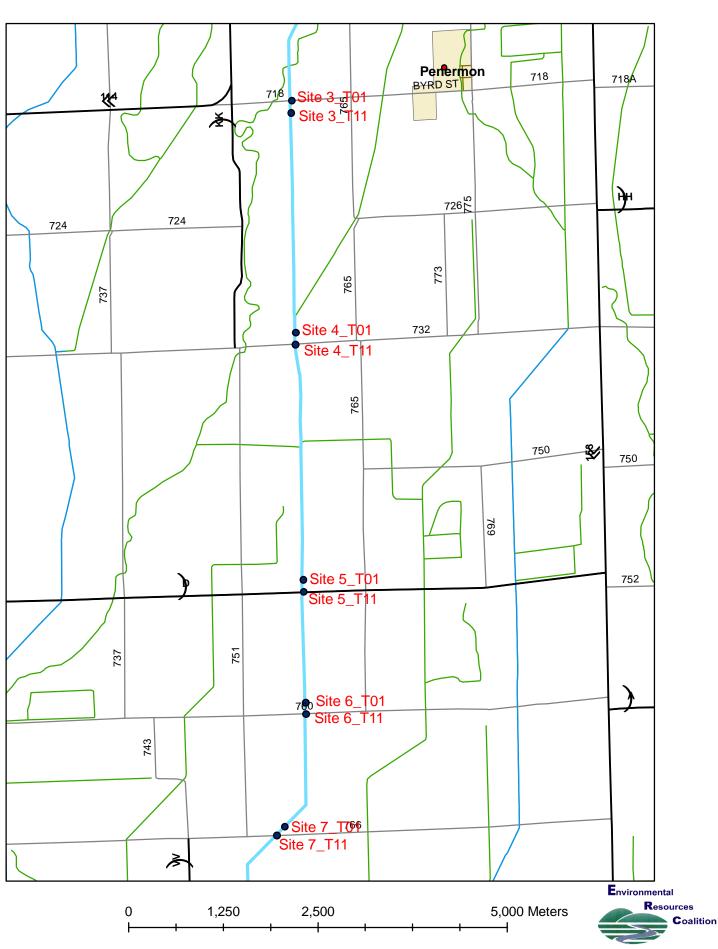
On

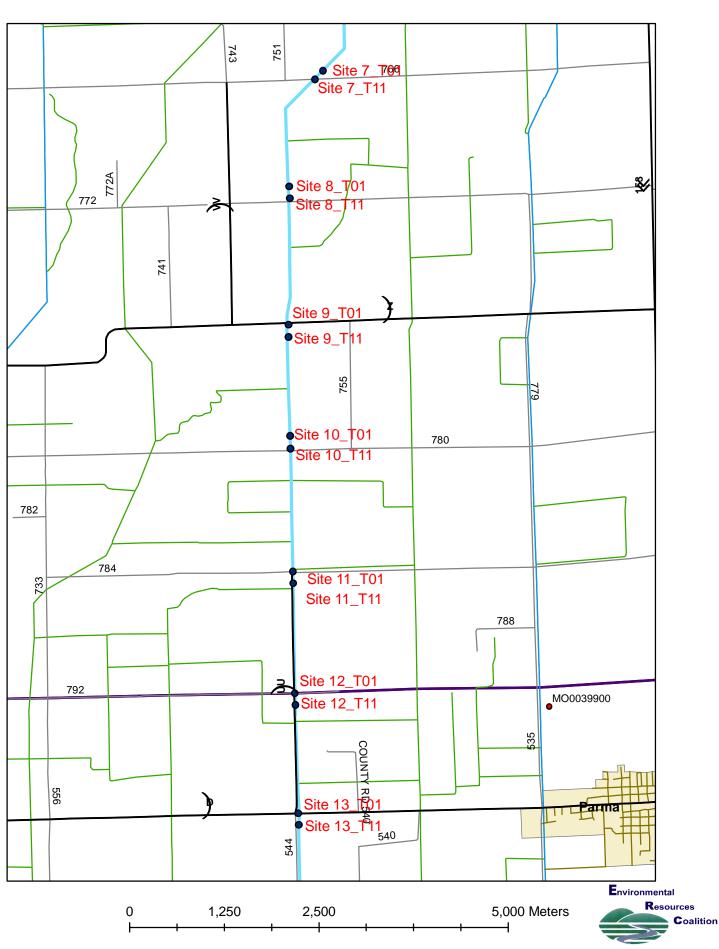
October 24, 2008

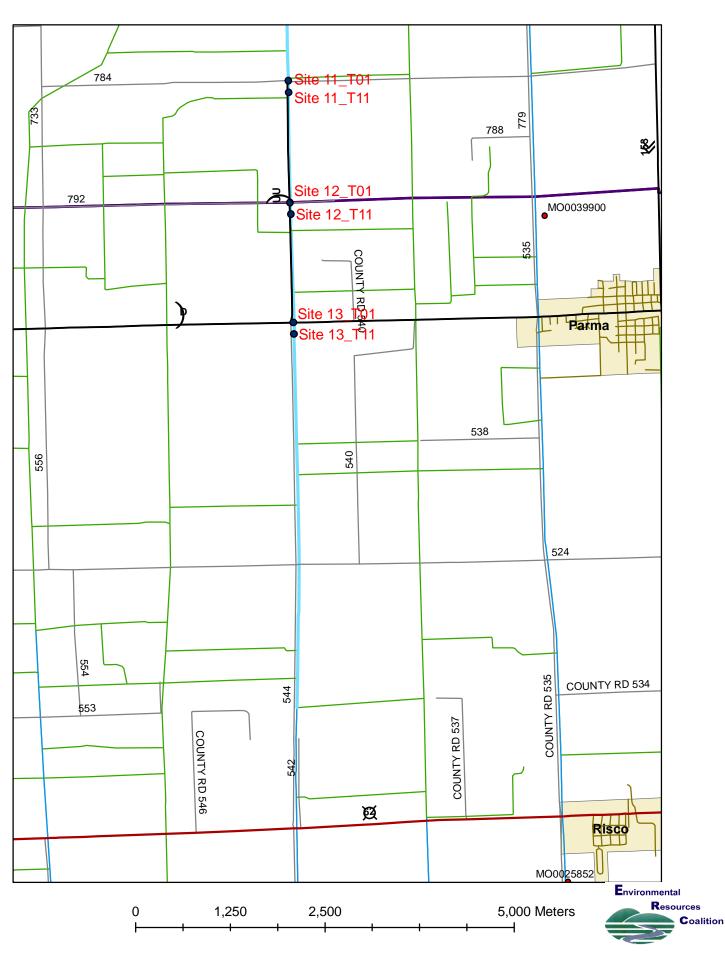
### Data Sheet A – Water Body Identification

I. Water Body Information (for water body being surveyed)
Water Body Name (from USGS 7.5' quad):
Missouri Water Body Identification (WBID) Number: 3097
8-digit HUC: 0820204 Little River Ditales
County(ies), Listed Upstream to Downstream: Stoddard, New Madrid
Upstream Legal Description (from Table H):
Downstream Legal Description (from Table H): 16, 22 N, 16
Number of sites evaluated: 3
List all site numbers, <u>consecutively</u> <u>upstream to downstream</u> :
See all data sheet B's for locations
Include a Site Location Map(s). The map must include all requirements detailed in the Missouri Recreational Use Attainability Analyses: Water Body Survey and Assessment Protocol (Section IV.D.8.a).
Facility Information (list all permitted discharges to this water body segment)  Facility Name(s) and Permit Number(s):  Essex WWTF MOOOS9 273  Essex Power Plant MO0123447
III. UAA Surveyor (please PRINT legibly)
Name of Surveyor: Abiquil C. Lynn Telephone Number: (373) 634-7078
Organization/Employer: ∨ ERC
Please verify that you have completed all sections of <u>all</u> data sheets, checked all applicable boxes, provided a map (that includes all requirments listed in the <i>Missouri Recreational Use Attainability Analysies: Water Body Survey and Assessment Protocol</i> ) and that this form is complete.
Signed:









#### **Weather Conditions**

Weather conditions ten days pervious to stream assessment are listed in the tables below. The date(s) that the stream was assessed are shaded.

Data from the WeatherUnderground.com Malden, MO

Date	Precipitation (Inches)	Min. Temp (°F)	Max. Temp (°F)	Avg. Temp (°F)
9/22/2008	-	-	-	-
9/23/2008	0.00	70.0	90.0	82.0
9/24/2008	0.00	64.0	88.0	75.0
9/25/2008	0.00	61.0	88.0	74.0
9/26/2008	0.00	57.0	84.0	71.0
9/27/2008	0.00	57.0	86.0	70.0
9/28/2008	0.00	57.0	88.0	71.0
9/29/2008	0.01	59.0	86.0	73.0
9/30/2008	0.00	61.0	75.0	69.0
10/1/2008	0.00	50.0	77.0	63.0
10/2/2008	0.00	48.0	70.0	59.0
10/3/2008	0.00	45.0	75.0	60.0
10/4/2008	0.00	46.0	81.0	62.0
10/5/2008	0.00	50.0	86.0	67.0
10/6/2008	0.00	55.0	86.0	70.0
10/7/2008	0.59	64.0	79.0	72.0
10/8/2008	0.00	55.0	73.0	66.0

、 WBID#	3097
Site#	/

### Data Sheet B — Site Characterization (Page 1 of 3) (must be completed for each site)

	Date & T	ime:	10/8/	08 /6	:11		l l		e.g., road cross		
	Stream N	lame	: (	计比样			upst		at Hu	,	
	Current V	Veath	er Conditi	ons: 66	o C	lear	Facility Name	رن).	sex wwt	rrant	
	Weather	Cond	itions for F	ast 10 days: 💪	440	cheel	Permit Numb	(-)	NO 00892°	73	
				ons at time of this	-						
	No droug	ht ⊠;	Phase I □	; Phase II □; Pha	se III 🗆	]; Phase IV	⊓; Unknown □				
Si	te Locat	ion:									
	LOCATIO	N CO	ORDINATE	S (UNIVERSAL) TR	ANSVE	RSE MERCA	TOR PROJECTIO				
	Site 01	East	ing (UTM	X): 165024754	Nor	thing (UTN	MY): 408378	7 Horiz 7 ŒPB	zontal Accuracy / FOM / PDOI		
	Site 11 Easting (UTM X): 1650247536 Northin						MY): 408363	11	ontal Accuracy / FOM / PDOI	7: 5 Meters	
Dh	otos:								,		
h 11	Photo ID# Photo Purpose					ID#	Photo Purpo	se	Photo ID#	Photo Purpose	
	Photo ID# Photo Purpose					ID#	Photo Purpo	se	Photo ID#	Photo Purpose	
			1	Mary 2, 1911 14							
	Photo ID# Photo Purpose					ID#	Photo Purpo	Photo Purpose		Photo Purpose	
									•		
He	as Obsa	mrod	* (TInon s	actually observed	ot the t	ime of curv	(AV.)		, , , , , , , , , , , , , , , , , , ,		
	ses Observed*: (Uses actually observed at the ☐ Swimming ☐ Skin diving					□ SCUB		☐ Tubi	ng	☐ Water skiing	
	☐ Wind surfing ☐ Kayaking			☐ Boatin		□ Wad	ing	☐ Rafting			
	☐ Hunting ☐ Trapping					☐ Fishin			e of the above	☐ Other:	
ļ	Describe: (	Includ			photo-do			/ \		t D- Recreational Use Interview	
	when condu	cting ii	nerviews.)								

Stream Name & WE	BID# Ditch	#(	0 3	09	7	_ Date o	of Survey	10/8/03
Site #				-				
	Field Data Sh	reets fo	or Recreation	al Uso	e Stream	Surveys		
	Data Shee	tB-	Site Charact	teriza	tion (Page	2 of 3)		
Surrounding Condition	ons*: (Mark all that pro	omote or i	mpede recreational u	ses. Atta	ch photos of ev	idence or unusual	items of inte	erest.)
☐ City/county parks	☐ Playgrounds	□М	OC conservation	lands	☐ Urba	n areas	□ R	ural Residential
☐ Campgrounds	☐ State parks	□ Na	tional forests		☐ Natu	re trails	☐ St	airs/walkway
☐ Boating accesses	☐ Fence	□ No	trespass sign		Steep	slopes		ther:
Comments:	fields							
Evidence of Human L	Jse*: (Attach photos ar	nd reference	ce in "Photos" section	1.)	1			
☐ Roads	☐ Foot paths/prin	ts [	☐ Dock/platforn	1	☐ Campii	ng Sites	☐ Rope	swings
☐ RV / ATV Tracks	☐ Fire pit/ring		☐ NPDES Disch	narge	☐ Fishing	Tackle	☐ Lives	tock Watering
None of the above	Comments / Other:							
Substrate*: (These values	s should add up to 100%.)							
% Cobble	% Gravel		% Sand	20	% Silt	80% Mu	i/Clay	% Bedrock
Aquatic Vegetation*:	(Note amount of vegetation				)			
Water Characteristics	3*: (Mark all that apply.)	)						
	Sewage □ M		☐ Chemica	1	□ None	□ O	ther:	
Color:	l Clear	een	☐ Gray		☐ Milky	□ O	ther:	
Bottom Deposit:	l Sludge 🔲 Sc	olids	Fine sedi	ments	□ None	□ O	ther:	114
Surface Deposit:	l Oil 🔲 Sc	um	☐ Foam		□ None	□ O:	ther:	/

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

	Stream Name & W	BID#	h#6	3097	Date of Surve	y 10/8/08						
	Site #			,		, , , ,						
		Field Data She	ets for Recreatio	nal Use Stream	Surveys							
	Data Sheet B – Site Characterization (Page 3 of 3)											
Addi	Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)											
	Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)						
Com	ments: (Please recor	d any additional comments her	e.)									
	None	Day -	Litch le	ed was	mudely!	and the second						
	Vone Dry - Litele bed was mudely to smelled like sewage											
	gnelle	V XXXX /L	avoge									
Pleas		have completed all	sections, checke	ed all applicable	e boxes, and that th	ie form is						
Printe	d Names of Person	nel Collecting Data:	Abigail L	yun + 7	Javis Howe	24						
Surve	yor's Signature:	alique	Turn	Date of Survey	: 10/8/28							
Organ	ization: E	RCI	]	Position:	eld Man	ryly						

																		Disso	olved O	xygen		
	Stream	Name:	Ditch #	6		•	Waterbo	ody ID:	3097		-	Site #:	1		•	Date:	10/8	/2008	-	Time:	16	:11
	Estimat	ed Chanr	nel Incisi	on:	Dry	(m) (hei	ght betw	een low	bank wic	dth and v	vater)					Di	issolved	Oxygen:	Dry		(mg/L)	
		cation - l UTM X			, Northir		Y), Hori UTM Y:		ccuracy 4083787		e ( <u>EPE</u> /	PDOP / 1 +/-		(meters)		Di	issolved	Oxygen:	Dry		(% sat)	
		UTM X				•)	UTM Y:		4083630		•	+/-		(meters)	•			ic Cond:			(μS/cm)	1
	_	e Stream ermne Le			Dry			(meters)	•	-	Survey S	Segment: n width)	150		(meters)	Wa		perature:			(°C)	
		ld Staff:			Travis H	owell (A	L & TH)	ı										•			. ,	
										Tra	nsect C	ross-Sec	ction									
		)1		2		3	0	4		)5		6		7		8		)9 I		10		1
Station	Distance (m)	Depth (m)		Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)		Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)		Depth (m)		Depth (m
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0		0		0		0		0		0		0		0		0		0	
2	0		0		0		0		0		0		0		0		0		0		0	
3	0		0		0		0		0		0		0		0		0		0		0	
4	0		0		0		0		0		0		0		0		0		0		0	
6	0		0		0		0		0		0		0		0		0		0		0	
7	0		0		0		0		0		0		0		0		0		0		0	
8	0		0		0		0		0		0		0		0		0		0		0	
9	0		0		0		0		0		0		0		0		0		0		0	
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type	D	)rv	ח	rv	ח	rv	D	rv	ח	rv	ח	rv	ח	rv	ח	rv	ח	rv		)rv		rv

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

	Surveyor's Signature:	Abigail L. Lvnn	Date:	10/8/2008
--	-----------------------	-----------------	-------	-----------

WBID# <sub>.</sub>	309	7
Site#	2	

### Data Sheet B – Site Characterization (Page 1 of 3) (must be completed for each site)

Date & 7	Γime:	10/8	7/08	15:	30	Location De	scription (	e.g., road crossi	ng):				
Stream	Name	: 0:4	山世人	0		Downstream OFF Co Rd 570							
Current	Weath	er Conditio	ons: 650	leav	~	Facility Nam	ic(s).	ssex wat	er Plant				
Weather	Cond	itions for F	ast 10 days:	1-7-tac	ched	Permit Number(s): MOOD 37 273							
Official I	Droug	ht Conditio	ons at time of th	is survey	(search	DNR home page f	or "drougl	nt''):					
No droug	ght <b>X</b> ;	Phase I □	; Phase II □; P	hase III 🗆	]; Phase [	IV □; Unknown □							
Site Locat	tion:	OPDINATE	S (UNIVERSAL)	RANSVE	SE MER	CATOR PROJECTION	N. IN MET	TERS)					
	I						THE THE CONTRACTOR	zontal Accuracy	: Meters				
Site 01	East	mg (UTM	X): <sub>16</sub> 50246			TM Y): 40799 7	The state of the s	FOM / PDOP	, -				
Site 11	East	ing (UTM	X):/6202460	Nor	thing (U'	ГМ Y): 407 981	(EPA	zontal Accuracy 7 / FOM / PDOP	: Meters				
			10000 100	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		70-10							
hotos:													
Photo II	Photo ID# Photo Purpose Pho				D#	D# Photo Purpose		Photo ID#	Photo Purpose				
Photo II			to Purpose	Photo		Photo Purp		Photo ID#	Photo Purpose				
	Thete Bill Thete Paper												
				Photo			Photo Purpose		Photo Purpose				
								·					
Jses Obse	erved	<b>!*:</b> (Uses <u>a</u>	actually observe	ed at the t	ime of su	rvey.)							
☐ Swim	☐ Swimming ☐ Skin diving		g	□ sct	JBA diving	☐ Tub	ing	☐ Water skiing					
□ Wind	☐ Wind surfing ☐ Kayaking			☐ Boa	ting	□ Wad	ling	☐ Rafting					
☐ Hunti	ng		☐ Trapping		☐ Fish	ing	Non	e of the above	☐ Other:				
		le number of i		ng, photo-do			// \		t D- Recreational Use Interview				
when cond	ucting i	nterviews.)											

Stream Name & WBID#_	Ditch #6	3097	Date of Survey 10/8/08
Site #			
<u>Fi</u>	eld Data Sheets for Re	ecreational Use Stream Su	irveys

			it B – Site Chai					
Su	rrounding Conditi		omote or impede recreation  MDC conserva		h photos of ev		1	interest.) Rural Residential
	☐ City/county parks	☐ Playgrounds ☐ State parks	☐ National forest		□ Natu			Stairs/walkway
	☐ Campgrounds ☐ Boating accesses	☐ State parks	☐ No trespass sig		Steep			Other:
	Comments:	n Fields				ı		
Evi	dence of Human l	Use*: (Attach photos ar	nd reference in "Photos" s	ection.)				
	□ Roads	☐ Foot paths/prin	ts 🗆 Dock/plan	tform	☐ Campi	ng Sites	□ Ro	pe swings
	☐ RV / ATV Tracks	☐ Fire pit/ring	☐ NPDES I	Discharge	☐ Fishing	g Tackle	□ Liv	estock Watering
SII	None of the above	Comments / Other:						
	% Cobble	% Gravel	% Sand	10	% Silt	90 % Mu	d/Clay	% Bedrock
Aq	uatic Vegetation*:	(Note amount of vegetations) (Note amount of vegetations)						
Wa	iter Characteristic	S*: (Mark all that apply.)	)		* *			
		Sewage		*	None			
	Color:	Clear G	reen 🗆 Gray	I	☐ Milky		ther:	
	Colori	J Clear						
		Sludge □ Sc		sediments	□ None			

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

v	Stream Name & W	BID# Ditch =	H 6	3097	Date of Surve	y 10/8/08					
	Site #	-									
		Field Data Shee	ets for Recreation	nal Use Stream	Surveys						
Data Sheet B – Site Characterization (Page 3 of 3)											
Add	itional Stream M	orphology: (Record iso	lated pools or other featu								
	Channel Feature	access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)					
					*						
Comments: (Please record any additional comments here.)											
- Ditch is very hard to walk in med is kneedeep											
prior a very anne											
Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.											
Printed Names of Personnel Collecting Data: 16 igns Lynn & Itax's Howell  Surveyor's Signature: Date of Survey: 10/8/08  Organization: Position: Position: 11/11/11/11/11/11/11/11/11/11/11/11/11/											
Surveyor's Signature: Date of Survey: Date of Survey: Date of Survey:											
Orga	unzanon		·		en an archis - fl see Sell de Sell de Sellender						

																Dissolved Oxygen								
		Name: ed Chanr				-	Waterbo				•	Site #:	2			Date:	10/8/	/2008	-	Time:	15:	:30		
							eight between low bank width and water)							Di	issolved	Oxygen:	14.02		(mg/L)					
		cation - l			, Northin		Y), Hor UTM Y:		Accuracy 4079978		( <u>EPE</u> /	PDOP / 1 +/-		(meters)		Di	issolved	Oxygen:	175.3		(% sat)			
		UTM X				-	UTM Y:		4079814		•	+/-		(meters)			issorveu	Oxygen.	173.3		(70 Sat)			
	Average	e Stream	Width:		4.7			(meters)	I.	ength of	Survey S	Segment:	150		(meters)		Specif	ic Cond:	112		(µS/cm)			
	_	ermne Le		Reach)	1.7			(ineters)	-	_	ge stream	_	130		(meters)	Wa	ıter Temp	perature:	26.1		(°C)			
	Fiel	ld Staff:	Abby L	vnn and	Travis H	owell (A	L & TH)	)																
	Transect Cross-Section																							
										Tra	nsect Ci	ross-Se	ction											
		1	_	2		3		4		5		6	_ ~	7		8		9		10		1		
Station	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m		
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1	0.43	0.05	0.18	0.04	0.68	0.09	0.55	0.08	0.46	0.04	0.41	0.02	0.39	0.04	0.49	0.1	0.48	0.04	0.45	0.04	0.5	3.09		
2	0.86	0.07	0.36	0.06	1.36	0.1	1.1	0.11	0.92	0.07	0.82	0.04	0.78	0.07	0.98	0.09	0.96	0.08	0.9	0.13	1	0.09		
3	1.29	0.09	0.54	0.1	2.04	0.05	1.65	0.13	1.38	0.09	1.23	0.06	1.17	0.05	1.47	0.08	1.44	0.08	1.35	0.19	1.5	0.		
4	1.72	0.1	0.72	0.1	2.72	0.05	2.2	0.15	1.84	0.11	1.64	0.09	1.56	0.05	1.96	0.08	1.92	0.09	1.8	0.1	2	0.0		
5	2.15	0.07	0.9	0.13	3.4	0.06	2.75	0.17	2.3	0.1	2.05	0.13	1.95	0.06	2.45	0.07	2.4	0.06	2.25	0.08	2.5	0.0		
6	2.58	0.06	1.08	0.15	4.08	0.11	3.3	0.18	2.76	0.12	2.46	0.15	2.34	0.14	2.94	0.08	2.88	0.07	2.7	0.07	3	0.0		
7	3.01	0.09	1.26	0.15	4.76	0.12	3.85	0.2	3.22	0.06	2.87	0.08	2.73	0.08	3.43	0.07	3.36	0.05	3.15	0.06	3.5	0.0		
8	3.44	0.08	1.44	0.17	5.44	0.13	4.4	0.12	3.68	0.04	3.28	0.04	3.12	0.03	3.92	0.05	3.84	0.03	3.6	0.03	4	0.0		
9	3.87	0.05	1.62	0.1	6.12	0.09	4.95	0.11	4.14	0.02	3.69	0.02	3.51	0.03	4.41	0.03	4.32	0.03	4.05	0.03	4.5	0.03		
Right Bank	4.3	0	1.8	0	6.8	0	5.5	0	4.6	0	4.1	0	3.9	0	4.9	0	4.8	0	4.5	0	5	0		
Feature Type																			1					

Run

Run

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

Run

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Run

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

Run

All measurements to be taken to the nearest 0.01 meter.

Run

(riffle, run, or poo

	Surveyor's Signature:	Abigail L. Lvnn	Date:	10/8/2008
--	-----------------------	-----------------	-------	-----------

Run

Run

Run

Run

Run

WBID# <u>3097</u> Site#\_3

#### Field Data Sheets for Recreational Use Stream Surveys

### Data Sheet B – Site Characterization (Page 1 of 3) (must be completed for each site)

Date & T	ime: )0/8	108 1	4:5	7	Location Desc	eription (	e.g., road crossi	ng):				
Stream I	Name:	ch #6			Mown 3							
Current V	Weather Condition	ons: 650	lea	V	Facility Name	,(U).	Sex WWT1	a Flama				
Weather	Conditions for F	ast 10 days:	fuch	01	Permit Numbe	er(s):	M00059	273				
Official I	Drought Condition			(search I	ONR home page for	r "drough	t'"):					
No droug	tht ⊠; Phase I □	; Phase II □; Phas	se III 🗆	; Phase Γ	V □; Unknown □							
	·											
Site Locat	ion:	S (UNIVERSAL) TR	NSVF	SEMERG	ATOR PROJECTION	V. IN MET	ERS					
Site 01					TM Y): 4075(9(	***	contal Accuracy	. Motors				
Site of		X):165024545		Horizontal Accuracy: Meters								
Site 11	Easting (UTM	X): <sub>1650245403</sub>	3 Nor	thing (UT	TM Y): 407499-	) (EPÉ	FOM / PDOI	P) (Meters				
District							<b>y</b>					
Photos:	)# Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose				
THOIC IL				200	-, -1. 7	5 h	0.00	une 2 maro				
	The sys	219 KALU	01		1 57-10 3							
Photo II		to Purpose	Photo	D#	Photo Purpo		Photo ID#	Photo Purpose				
PHOIO IL	7# 110	to i ui pose	1 HOLO	1Dπ	Thoto Turpo	Thoto ID!!						
							1					
Photo II	)# Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose				
Uses Observed*: (Uses actually observed at the time of survey.)												
☐ Swim	ming	☐ Skin diving		□ SCU	BA diving	☐ Tubi	ing	☐ Water skiing				
☐ Wind	☐ Wind surfing ☐ Kayaking			☐ Boat	ing	☐ Wad	ling	☐ Rafting				
☐ Hunti	ng	☐ Trapping		□ Fishi			e of the above	☐ Other:				
Describe:	(Include number of	individuals recreating,	, photo-documentation of evidence of recreational uses, etc. Use Data Sheet D-Recreational Use Interview									
when condi	icting interviews.)											

Stream Name & WBID	o# Ditca	#	6	3097	7	Date	of Surve	ey <u>/0/8/08</u>
Site #3								/ / *
Oile #	12° 1110 - 4 - 61-	4	for Dographic	anal Tigo	Straam	CHERNANG		
	Field Data Sh	eets	10r Recream	mai Use	Sucam	Surveys		
	Data Shee	t B –	- Site Chara	cteriza	tion (Page	e 2 of 3)		
Surrounding Condition	S*: (Mark all that pro	mote o	r impede recreations	ıl uses. Attac	ch photos of ev	vidence or unusua	l items of	interest.)
☐ City/county parks	☐ Playgrounds		/IDC conservation		☐ Urba		I .	Rural Residential
☐ Campgrounds	☐ State parks		Vational forests		☐ Natu	re trails		Stairs/walkway
☐ Boating accesses	☐ Fence		Vo trespass sign		Stee	p slopes		Other:
Comments:	Fields				7			
Evidence of Human Us	<b>e*:</b> (Attach photos an	d refere	ence in "Photos" sec	tion.)				
☐ Roads	☐ Foot paths/print	ts	☐ Dock/platfo	orm	☐ Campi	ng Sites	☐ Ro	pe swings
□ RV / ATV Tracks	☐ Fire pit/ring		☐ NPDES Dis	scharge	☐ Fishing	g Tackle	Liv	vestock Watering
None of the above	Comments / Other:							
Substrate*: (These values sh							1/61	W.D. 1 Is
% Cobble	% Gravel	2	% Sand	10	% Silt	(C) % Mt	ıd/Clay	% Bedrock
Aquatic Vegetation*: (	Note amount of vegetatio	n or alg	al growth at the asse	essment site.	)			
None	-dead ple	h	Mister	o le	n do	tlem	)	
Water Characteristics*	: (Mark all that apply.)	ielov		cal	□ None		Other:	

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

☐ Chemical

Fine sediments

☐ Gray

Foam

□ None

☐ Milky

□ None

□ None

☐ Other:

☐ Other:

☐ Other:

Data Sheet B Revised: December 19, 2007

Odor:

Color:

Bottom Deposit:

Surface Deposit:

X Sewage

☐ Clear

☐ Sludge

□ Oil

☐ Musky

Green

☐ Solids

☐ Scum

Stream Name & WBID#_	DHUTG	3097	Date of Survey /0/8/08
म	ield Data Sheets for Recr	reational Use Stream Sur	veys

### Data Sheet B – Site Characterization (Page 3 of 3)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)
				:	

Cor	nments: (Please record any additional comments here.)	
	- lote of dead fish 1-3 inches large - looks like stream led had been dry best rase	
	- lots of debris (trash) instream - tires, crates, puns, etc.	

Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.

Printed Names of Personnel Collecting Data:	Asignil	Lunn:	+ Tu	2015 Hawe	<u> </u>
			,		
Surveyor's Signature:	Tunn	Date of Su	rvey:	10/4/28	
Organization:		Position: 9	Feld	Marray	0_
				. /	-

									utu O	1001		ia ca		· · · · · · · · · · · · · · · · · · ·								
																		Disso	lved O	xygen		
1	Stream 1	Name:	Ditch #	6			Waterbo	dy ID:	3097			Site #:	3			Date:	10/9/	/2008		Time:	14:	:57
	Estimate	ed Chann	nel Incisi	on:	0.2	(m) (hei	ght betw	een low l	oank wic	lth and w	ater)					Di	ssolved	Oxygen:	10.77		(mg/L)	
1	GPS Lo	cation - I	Easting (	UTM X),	, Northin	g (UTM	Y), Hori	zontal A	ccuracy	Estimate	( <u>EPE</u> /	PDOP / I	FOM)					- 1- J B - 1-1			(8)	
		UTM X					UTM Y:		4075156			+/-		(meters)		Di	ssolved	Oxygen:	129.6		(% sat)	
	11	UTM X	1680243	5403		(	UTM Y:		4074997			+/-	8	(meters)			Specif	ic Cond:	433.5		(μS/cm)	
	Average	e Stream	Width:		4.5			(meters)	L	ength of	Survey S	Segment:	150		(meters)			•				
ľ	(To dete	ermne Le	ngth of I	Reach)					(2	0x avera	ge strear	n width)				Wa	ter Temp	perature:	24.8		(°C)	
	Fiel	ld Staff:	Abby Ly	ynn and T	Γravis Ho	owell (Al	L & TH)															
										TF.	4.0	ď										
ŀ										Trai	isect Ci	ross-Sec	ction									
ļ	Ť	)1	0	2	0	3	0	4	0	5		6	0	7		)8		)9		10	1	1
	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.39	0.15	0.48	0.27	0.38	0.07	0.33	0.04	0.47	0.07	0.46	0.07	0.45	0.04	0.45	0.04	0.48	0.06	0.49	0.07	0.58	0.06
2	0.78	0.31	0.96	0.39	0.76	0.11	0.66	0.07	0.94	0.12	0.92	0.15	0.9	0.07	0.9	0.04	0.96	0.1	0.98	0.14	1.16	0.12
3	1.17	0.31	1.44	0.38	1.14	0.13	0.99	0.12	1.41	0.13	1.38	0.22	1.35	0.1	1.35	0.04	1.44	0.1	1.47	0.18	1.74	
4	1.56	0.29	1.92	0.4	1.52	0.12	1.32	0.18	1.88	0.1	1.84	0.19	1.8	0.08	1.8	0.05	1.92	0.08	1.96	0.2	2.32	
5	1.95	0.17	2.4	0.37	1.9	0.12	1.65	0.2	2.35	0.05	2.3	0.18	2.25	0.05	2.25	0.03	2.4	0.05	2.45	0.19	2.9	0.15
ľ	2.34	0.14	2.88	0.22	2.28	0.00	1.98	0.2			2.76	0.2	2.7	0.05			2.88	0.13	2.94	0.14	3.48	

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

0.09

0.08

0.06

0

2.31

2.64

2.97

3.3

Run

0.19

0.15

0.07

0

3.29

3.76

4.23

4.7

0.1

0.07

0.08

0

Run

3.22

3.68

4.14

4.6

Run

0.15

0.08

0.04

3.15

3.6

4.05

4.5

Run

0.03

0.02

0.02

3.15

3.6

4.05

4.5

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

2.66

3.04

3.42

3.8

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

Run

All measurements to be taken to the nearest 0.01 meter.

2.73

3.12

3.51

3.9

0.08

0.05

0.04

0

Run

3.36

3.84

4.32

4.8

Run

0.27

0.16

0.07

Right Bank Feature Type

(riffle, run, or pool

	Surveyor's Signature: Abigail L. Lynn	Date:	10/8/2008
--	---------------------------------------	-------	-----------

Run

0.06

0.05

0.02

0

3.36

3.84

4.32

4.8

3.43

3.92

4.41

4.9

Run

0.12

0.07

0.07

0

Run

0.14

0.109

0.06

0

4.06

4.64

5.22

Run

5.8

0.16

0.14

0.08

0

### Data Sheet B – Site Characterization (Page 1 of 3) (must be completed for each site)

	Date & 7	Time:	10/8	108 19	413	7	Location Desc	ription	(e.g., road crossi	ng):					
	Stream	Name	· D:+	ch #6				Upstream at CoRd 732							
Ī	Current	Weath	er Conditio	ons: (670	clo	20.5	Facility Name	Facility Name(s): Essex wutt							
	Weather	Cond	itions for P	ast 10 days:	tach	ed	Permit Numbe	er(s):	MD00892	3					
							ONR home page for	"drou							
	No droug	ght 🏿 ;	Phase I □	Phase II □; Phas	se Ш □	l; Phase I	V □; Unknown □								
Si	te Loca	tion:	ORDINATES	CUNIVERSAL TR	NSVEI	SE MERO	ATOR PROJECTION	, IN MI	ETERS)						
	Site 01			X):16024527	i i		ГМ Y): <sub>{O7209</sub>		rizontal Accuracy PE FOM / PDOF	· Meters					
	Site 11			X):165024526			TM Y): 4071939	110	rizontal Accuracy PEY FOM / PDOF						
Ph	otos:														
	Photo II	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose					
İ	Photo II			to Purpose	Photo		Photo Purpo		Photo ID#	Photo Purpose					
	No. 1														
	Photo II			to Purpose	Photo	- 1	Photo Purpo		Photo ID#	Photo Purpose					
										•					
Uses Observed*: (Uses actually observed at the time of survey.)															
US [				☐ Skin diving	at me t		JBA diving	☐ Tı	ıbing	☐ Water skiing					
						☐ Boar				☐ Rafting					
								. /	one of the above	☐ Other:					
	Describe:	ing (Includ	de number of i	☐ Trapping	photo-do	☐ Fish	n of evidence of recreat			et D- Recreational Use Interview					
	when cond	lucting i	interviews.)	,	•										
- 1															

Data Sheet B Revised: December 19, 2007

P

Stream Name & WBID#_	Ditch#6	3097	Date of Survey 10/8/08
Site #	,		/ /

#### Data Sheet B – Site Characterization (Page 2 of 3)

ırrounding Condi	tions*: (Mark all that p	omote or in	npede recreational uses. Atta	ch photos of ev	idence or unusua	l items of inte	erest.)
☐ City/county park			C conservation lands	□ Urba		No. 4	ıral Residential
☐ Campgrounds	☐ State parks	☐ Nat	ional forests	☐ Natu	re trails	□ St	airs/walkway
☐ Boating accesses	☐ Fence	□ No	trespass sign	☑ Stee	slopes	□ Ot	her:
Comments:	arm field	Ls_					
	Use*: (Attach photos a				G.,	□ D	
☐ Roads	☐ Foot paths/pri		Dock/platform	☐ Campi		☐ Rope	
☐ RV / ATV Track	s ☐ Fire pit/ring		NPDES Discharge	☐ Fishing	g Tackle	☐ Lives	tock Watering
<b>bstrate*:</b> (These val	ues should add up to 100%.) % Gravel	20	) % Sand //)	% Silt	76) 0/ Ma	ıd/Clay	% Bedrocl
	*: (Note amount of vegetation one Dry	on or algal ş	growth at the assessment site	).)			
Odor:	CS*: (Mark all that apply  ☐ Sewage ☐ N	lusky	□ Chemical	□ None	- Andrew - A	)ther:	
	□ Clear □ G		☐ Gray	☐ Milky		Other:	100
Bottom Deposit:	☐ Sludge ☐ S	olids	☐ Fine sediments	☐ None		other:	114
Surface Deposit:	□ Oil □ S	cum	☐ Foam	☐ None	$\Box$ C	ther:	(

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Stream Name & WBID#_	Ditch#6	3097	Date of Survey /0/6/08
E	ield Data Sheets for Recr	_	;

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (1	

Comments: (Please record any additional comments here.)
Dry None
Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.  Printed Names of Personnel Collecting Data:
Printed Names of Personnel Confecting Data.
Surveyor's Signature:

																		Disso	lved Ox	xygen		
		Name:					Waterbo				-	Site #:	4			Date:	10/8	/2008		Time:	14:	37
	Estimat	ed Chanr	nel Incisi	on:	Dry	(m) (hei	ght betw	een low	bank wic	lth and v	vater)					D:	issolved	Oxygen:	Dry		(mg/L)	
	01	cation - l UTM X	16S024	5277	, Northin		UTM Y:		Accuracy 4072094		e ( <u>EPE</u> /	+/-		(meters)		D	issolved	Oxygen:	Dry		(% sat)	
							UTM Y:		4071935			+/-		(meters)			Specif	ic Cond:	Dry		(µS/cm)	
	_	e Stream ermne Le			Dry			(meters)		ength of Ox avera	-	Segment: n width)	150		(meters)		ter Tem	perature:	Dry		(°C)	
	Field Staff: Abby Lynn and Travis Howell (AL & TH)																					
	Transect Cross-Section								L													
		)1		2		3	0	4		5		6		7		)8		9		0	1	1
Station	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0		0		0		0		0		0		0		0		0		0	
2	0		0		0		0		0		0		0		0		0		0		0	
3	0		0		0		0		0		0		0		0		0		0		0	
4	0		0		0		0		0		0		0		0		0		0		0	
5	0		0		0		0		0		0		0		0		0		0		0	
6	0		0		0		0		0		0		0		0		0		0		0	
7	0		0		0		0		0		0		0		0		0		0		0	
8	0		0		0		0		0		0		0		0		0		0		0	
9	0		0		0		0		0		0		0		0		0		0		0	
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type		)rs/		irsy		rv.		rv.		irs,		irsy	7	irs/		)rs/		erv.		irs)	D,	
(-:6011		ITX/	. 1)	IT (7	. 1)	T17		r17	. 13	r:17		IT ( /		T (7		ITS/		T (7		TT 5.7		CV

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Surveyor's Signature:	Abigail L. Lvnn	Date:	10/8/2008

; WBID# <u>≤</u>	3097
Site#	5

### Data Sheet B – Site Characterization (Page 1 of 3) (must be completed for each site)

	P. C.					· · · · · · · · · · · · · · · · · · ·							
D	ate & T	ime:	15/8/0	08	14:0	20		Location Description (e.g., road crossing):					
S	tream N	lame:	Di+	ch #6			apstro	Upstream at Hwy D					
С	urrent V	Weath	er Conditio	ons: 65°	Jea		Facility Name	65	sex wwith	Plant			
W	Veather	Condi	itions for P	ast 10 days:	Haclo	λ	Permit Numb		10 002927 10 012344	3			
0	fficial I	Droug	ht Conditio	ons at time of thi	s survey	(search D	NR home page for	r "drough	t"):				
N	No drought ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐												
Site	Locat	ion:	ODINATE	S (UNIVERSAL) TI	RANSVEI	RSE MERCA	TOR PROJECTIO	N. IN MET	ERS)				
	ite 01				i i		MY): 400882		zontal Accuracy	Meters			
3.	116 01			X):162024517	1		400383	(EPH	/ FOM / PDOP zontal Accuracy	7 =			
S	Site 11 Easting (UTM X): 1650245171 Northing (UTM Y): 4068663 (EPE/FOM/PDOP) 8 Meters												
	Photos:				D1 4-	TD#	Photo Purpo		Photo ID#	Photo Purpose			
P.	hoto II	)#	Pno ———	to Purpose	Photo	D#	Photo Purpo		Thoto ID#	1 hoto 1 dipose			
.,								,	Photo ID#				
P	hoto II	)#	Pho	to Purpose	Photo	D#	Photo Purpo	Photo Purpose		Photo Purpose			
	hoto ID			to Purpose	Photo		Photo Purpo		Photo ID#	Photo Purpose			
Uses	: Ohse	rved	l*: (Uses a	actually observed	d at the t	ime of surv	vev.)						
	] Swim		(0505)	☐ Skin diving			BA diving	☐ Tub:	ing	☐ Water skiing			
	Wind		ng	☐ Kayaking		☐ Boatin		☐ Wad		☐ Rafting			
			·5	☐ Trapping		☐ Fishir		-	e of the above	☐ Other:			
D	Hunti	ц <u>в</u> (Includ	e number of i	ndividuals recreating	g, photo-do					et D- Recreational Use Interview			
			nterviews.)		=								

		p# Ditch=	#6	)	309	7	Date	of Surve	v 10/8/08	
Site	#					G.	a			
Field Data Sheets for Recreational Use Stream Surveys										
Data Sheet B – Site Characterization (Page 2 of 3)										
Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)										
	y/county parks	☐ Playgrounds		C conservat		☐ Urba			Rural Residential	
	mpgrounds	☐ State parks							Stairs/walkway	
	ating accesses	☐ Fence ☐ No trespass sign ☐ Steep slopes ☐ Other:							Other:	
Comm	Comments:  Envir Gelds									
Evidence	e of Human Us	<b>: (</b> Attach photos an	d reference	in "Photos" se	ection.)			1		
□ Ro	ads	☐ Foot paths/prin	ts 🗆	Dock/plat	form	☐ Camping Sites		☐ Rope swings		
□RV	/ ATV Tracks	☐ Fire pit/ring		NPDES D	ischarge	☐ Fishing	g Tackle	☐ Liv	restock Watering	
No.	one of the above	Comments / Other:								
Substrat	Ca*: (These values sl	hould add up to 100%.)								
	% Cobble	% Gravel	70	70 % Sand 10 % S		% Silt	∂% Mu	ıd/Clay	% Bedrock	
Aquatic	Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)									
	Nov	re Dry	Ì							

Water Characteristics\*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	□ None	☐ Other:
Color:	□ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☐ Fine sediments	□ None	□ Other:
Surface Deposit:	□ Oil	☐ Scum	☐ Foam	□ None	☐ Other:

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Stream Name & W	BID# Ditch	+6	3097	Date of Surve	y 10/8/08					
Site#										
Field Data Sheets for Recreational Use Stream Surveys										
Data Sheet B – Site Characterization (Page 3 of 3)										
ditional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)  Distance from Trick (m) And dien Dorth (m) May Dorth (m)										
Channel Feature	access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)					
mments: (Please recor	d any additional comments her	·e.)			·					
None-Dry										

Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.

Printed Names of Personnel Collecting Data: A Niguri L. Lynn + Tours Howell

Surveyor's Signature: Date of Survey: 108/08

Organization: Position: Tiple Manager

Ad

Co

																		Disso	olved Ox	xygen		
		Name:					Waterbo				='	Site #:	5			Date:	10/8	/2008	<u>.</u>	Time:	14:	:20
	Estimat	ed Chanr	nel Incisi	on:	Dry	(m) (hei	ght betw	een low	bank wic	lth and v	vater)					Di	issolved	Oxygen:	Dry		(mg/L)	
	GPS Lo <b>01</b>	ocation - I UTM X			, Northin		Y), Hori UTM Y:		Accuracy 4068825		e ( <u>EPE</u> /	PDOP / 1 +/-		(meters)		Di	issolved	Oxygen:	Dry		(% sat)	
	11	UTM X	16S0245	5171			UTM Y:		4068663		•	+/-	8	(meters)			Specif	ic Cond:	Dry		(μS/cm)	
	_	e Stream ermne Le			Dry			(meters)		-	-	Segment: n width)	150		(meters)		ter Tem	perature:	Dry		(°C)	
	Fie	ld Staff:	Abby Ly	ynn and	Travis H	owell (A	L & TH)															
										Tra	nsect C	ross-Sec	ction									
		)1		2		3	0	4		)5		6		7		)8		)9		.0	1	1
Station	Distance (m)	Depth (m)		Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)		Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)		Depth (m)		Depth (m)
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0		0		0		0		0		0		0		0		0		0	
2	0		0		0		0		0		0		0		0		0		0		0	
3	0		0		0		0		0		0		0		0		0		0		0	<u> </u>
4	0		0		0		0		0		0		0		0		0		0		0	
5	0		0		0		0		0		0		0		0		0		0		0	
6	0		0		0		0		0		0		0		0		0		0		0	
7	0		0		0		0		0		0		0		0		0		0		0	
8	0		0		0		0		0		0		0		0		0		0		0	
9	0	l	0		0		0		0		0		0		0		0		0		0	
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type			_		_		_						_		_						_	
(miccl a man an man)		)rx/	ı D	rx/	ı D	<b>rx</b> 7	ı D	rs/	ı D	1737	ı D	1737	ו ח	rx/	ו ח	rx/	ı D	rv	ı D	1737	D <sub>1</sub>	rv.

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

	Surveyor's Signature: Abigail L. Lynn	Date:	10/8/2008
--	---------------------------------------	-------	-----------

WBID#	<u> 309</u>	7
Site#_	6	

### Data Sheet B – Site Characterization (Page 1 of 3) (must be completed for each site)

							T						
	Date & T	ime:	10/8	108 /3	315	1			e.g., road crossi	•			
	Stream l	Name	· 0;	tch #6			Upstre	un c	off CoRd	760			
	Current	Weath	er Conditio	ons: (oco	clea	1.	Facility Name	(s): E	sex wutf	r Plant			
	Weather	Cond	itions for P	ast 10 days:	tacl	red	Permit Number(s): 0089273						
		_					NR home page for	r "drough	t''):				
	No droug	ght 🔼;	Phase I	; Phase II □; Phas	se III 🗆	]; Phase Γ	V □; Unknown □	100 0 To A					
		_											
Si	te Locat	tion:	ORDINATES	S (IINIVERSAI) TR	INSVEI	RSE MERC	ATOR PROJECTION	V. IN MET	ERS)				
	Site 01	1		X): <sub>16</sub> 50245/09	- 1		Meters  Horizontal Accuracy:  Meters						
	Site 11	East	ing (UTM	X):/65024509	Nor	Northing (UTM Y): 4007048 (EPE) FOM / PDOP)							
Ph	otos:			•	-								
	Photo II	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose			
			ł.		ID#	Photo Purpo		Photo ID#	Photo Purpose				
						3-2-1							
				to Purpose	Photo ID#		Photo Purpo		Photo ID#	Photo Purpose			
									•				
Us	Jses Observed*: (Uses actually observed at the time of survey.)												
				☐ Skin diving			BA diving	☐ Tubi	ing	☐ Water skiing			
	□ Wind			☐ Kayaking		☐ Boat	ing	☐ Wad	ling	☐ Rafting			
	☐ Hunti		5	☐ Trapping		☐ Fishi		X Non	e of the above	☐ Other:			
	Describe:	(Includ		ndividuals recreating,	photo-do					t D- Recreational Use Interview			
	when conducting interviews.)												

	<b>.</b>		210	). Ч		1.1.				
Stream Name & WBID	# Ditch	7	9 30	1 (	Date of	Survey /0/8/08				
Site #										
	Field Data Sh	eets i	for Recreational Use	Stream	Surveys					
			Site Characteriza							
Surrounding Condition	S*: (Mark all that pro	mote or	impede recreational uses. Attac	ch photos of ev	idence or unusual ite	ems of interest.)				
☐ City/county parks	☐ Playgrounds		IDC conservation lands	☐ Urba	n areas	☐ Rural Residential				
☐ Campgrounds	☐ State parks	□N	ational forests	☐ Natu	re trails	☐ Stairs/walkway				
☐ Boating accesses	☐ Fence	□N	o trespass sign	Steep	slopes	☐ Other:				
Farm F	fields									
Evidence of Human Us	e*: (Attach photos an	d refere	nce in "Photos" section.)							
☐ Roads	☐ Foot paths/print	S	☐ Dock/platform	☐ Campii	ng Sites	☐ Rope swings				
□ RV / ATV Tracks	☐ Fire pit/ring		☐ NPDES Discharge	☐ Fishing	Tackle [	☐ Livestock Watering				
None of the above Comments / Other:										
Substrate*: (These values should add up to 100%.)  % Cobble % Gravel 1/10 % Sand 2/2 % Silt 2/2% Mud/Clay % Bedrock										
% Cobble	% Gravel	./(	O % Sand 20	/ % Silt	/ // // 0 IVIUU/	Clay 70 Bedrock				
Aquatic Vegetation*: a		n or alga	al growth at the assessment site.	)						

Water Characteristics\*: (Mark all that apply.)

ici onaraotorio	Cioo i (mant an	arat approvi				
Odor:	☐ Sewage	□ Musky	☐ Chemical	□ None	☐ Other:	Λ
Color:	□ Clear	☐ Green	☐ Gray	□ Milky	☐ Other:	
Bottom Deposit:	☐ Sludge	☐ Solids	☐ Fine sediments	□ None	☐ Other:	
Surface Deposit:	□ Oil	☐ Scum	☐ Foam	□ None	☐ Other:	

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Site #		ets for Recreatio	nal Use Stream	Surveys	
	Data Sheet	B – Site Chara	cterization (Pag	ge 3 of 3)	
itional Stream M	orphology: (Record iso	plated pools or other feature	res identified during the	survey that may support recre	ational uses.)
Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m
4		,			
iments: (Please reco	rd any additional comments her	e.)			
Dry					
(					

Printed Names of Personnel Collecting Data:	11 Lunn + Travis Howell
Timted Traines of Total	
Surveyor's Signature:	Date of Survey: /0/8/08
Organization: ERC	Position: Tield Wanager
	V

																		Disso	olved Ox	xygen		
		Name:				-	Waterbo				-	Site #:	6			Date:	10/8	/2008	<u>.</u>	Time:	13:	59
	Estimat	ed Chanr	nel Incisi	on:	Dry	(m) (he	ight betw	een low	bank wic	lth and v	vater)					Di	issolved	Oxygen:	Dry		(mg/L)	
	01	UTM X	16S024	5105	, Northin		Y), Hor UTM Y:		ccuracy 4067202		e ( <u>EPE</u> /	+/-		(meters)		Di	issolved	Oxygen:	Dry		(% sat)	
						-	UTM Y:		4067048			+/-		(meters)			Specif	ic Cond:	Dry		(µS/cm)	
	_	e Stream ermne Le			Dry			(meters)	•	ength of Ox avera	-	Segment: n width)	150		(meters)		ter Tem	perature:	Dry		(°C)	
	Fie	ld Staff:	Abby L	ynn and	Travis H	owell (A	L & TH)	1														
										Tra	nsect C	ross-Sec	ction			<u> </u>						
		)1		2		3	0	4		5		6		7		)8		)9		0	1	1
Station	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0		0		0		0		0		0		0		0		0		0	
2	0		0		0		0		0		0		0		0		0		0		0	
3	0		0		0		0		0		0		0		0		0		0		0	
4	0		0		0		0		0		0		0		0		0		0		0	
5	0		0		0		0		0		0		0		0		0		0		0	
6	0		0		0		0		0		0		0		0		0		0		0	
7	0		0		0		0		0		0		0		0		0		0		0	
8	0		0		0		0		0		0		0		0		0		0		0	
9	0		0		0		0		0		0		0		0		0		0		0	
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type	_		_		_		_		_		_		-		_		_		_		_	
(-:	1 I'	)rx/	1 1)	rv.		1737	1 1)	<b>r</b> 37		1737	1 13	1737		rx/		rx/	1	rv		rx	D <sub>1</sub>	CV

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

	Surveyor's Signature: Abigail L. Lynn	Date:	10/8/2008
--	---------------------------------------	-------	-----------

WBID# 3097 Site # \_\_\_\_\_

#### Field Data Sheets for Recreational Use Stream Surveys

### Data Sheet B – Site Characterization (Page 1 of 3) (must be completed for each site)

Date &	Time:	10-8-0	v8 /3i.	38		Location Des	cription	(e.g., road crossi	ng):				
			4 # 6			upstre	iam o	off Co Rd SSEX WWTF ESSEX FOUR	766				
Current	Weath	er Conditio	ons: Ch 6	50		Facility Name	e(s): 🐔	Essex Four	fland				
Weather	Cond	itions for P	ast 10 days: 👩	Had	reil								
Official	Droug	ht Conditio	ons at time of this	survey	(search	rch DNR home page for "drought"):							
No droug	ght ℤ;	Phase I □	; Phase II □; Pha	ase III 🗆	]; Phase	ase IV □; Unknown □							
		-											
Si <u>te Loca</u>	tion:			A KING THE	SCHOOL SCHOOL	al Top projectio	NT TATAL	TEDES					
LOCATIO	1						Hot	azontal Accuracy	•				
Site 01	East	ing (UTM 1	X): <sub>10</sub> 5024473	8 Northing (UTM Y): 406579				(EPE ) FOM / PDOP) 5 Meters  Horizontal Accuracy: Meters					
Site 11	East	ing (UTM	X): 16502446	Nor	thing (U								
			10000-170	814		(0011)		E/FOM/PDOP	) —				
Photos:													
Photo II	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose				
						· · · · · · · · · · · · · · · · · · ·			Contract Contract Contract				
					ID#		Photo Purpose		Photo Purpose				
			1 11010 1 til pose										
	4				;								
Photo II			to Purpose	1	to ID# Photo Pur			Photo ID#	Photo Purpose				
								•					
Jses Obse	erved	*: (Uses a	actually observed	at the t	ime of su	ırvey.)							
	☐ Swimming ☐ Skin diving					JBA diving	☐ Tu	bing	☐ Water skiing				
□ Wind	l surfir	ng	☐ Kayaking		□ Воа	nting	□ Wa	ading	☐ Rafting				
☐ Hunt	ing		☐ Trapping		☐ Fish	ning	□ No	one of the above	☐ Other:				
Describe:	: (Includ	le number of i		, photo-de			1		t D- Recreational Use Interview				
		nterviews.)											

P

Stroam Nama & WRI	n# Ditel #	6 3097	7	Date of Su	rvey <u>/0 8 0 8</u>						
Site #	D# 101/01/			<del></del>							
	Field Data Sh	eets for Recreat	ional Use Stream	Surveys							
	Data Shee	t B – Site Char	acterization (Page	e 2 of 3)							
Surrounding Condition	ns*: (Mark all that pro	omote or impede recreatio	nal uses. Attach photos of ev	I							
☐ City/county parks	☐ Playgrounds	☐ MDC conservat	tion lands	an areas	☐ Rural Residential						
☐ Campgrounds	☐ State parks	☐ National forests	s 🔲 Natu	re trails	□ Stairs/walkway						
☐ Boating accesses	☐ Fence	☐ No trespass sign	n Stee	p slopes	Other:						
Comments: Farm F	ields.										
Evidence of Human Us	Evidence of Human Use*: (Attach photos and reference in "Photos" section.)										
□ Roads □ Foot paths/prints □ Dock/platform □ Camping Sites □ Rope swings											
☐ RV / ATV Tracks	☐ Fire pit/ring	☐ NPDES D	Pischarge	g Tackle	Livestock Watering						
None of the above Comments / Other:											
Substrate*: (These values should add up to 100%.)											
% Cobble	% Gravel	% Sand	% Silt	/00 % Mud/Cla	y % Bedrock						
Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)											
Algae Mass, Long Strands of filamentous algae											
Water Characteristics*: (Mark all that apply.)											
Odor:	Sewage	usky 🗆 Chen	nical 🗆 None	☐ Other:							

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

☐ Gray

☐ Foam

☐ Fine sediments

Green

 $\square$  Solids

☑ Scum

☐ Clear

☐ Sludge

□ Oil

Data Sheet B Revised: December 19, 2007

Color:

Bottom Deposit:

Surface Deposit:

☐ Other:

☐ Other:

☐ Other:

☐ Milky

None

□ None

Stream Name & WBID#	Ditch#6	3097	 Date of Survey <u>/८-8-</u> 08
Site #			

#### Data Sheet B – Site Characterization (Page 3 of 3)

Additional Stream Morphology: (Record isolated pools or other features identified during the survey that may support recreational uses.)

	Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)
-						
-						
-						

	-					
Comments:	(Please reco	d any additional comments he	ere )	1		
Johnniento.	(1 10450 1000)	d any additional comments in				
Ne	51e					
Please verify complete.	that you	have completed a	ll sections, check		A	he form is
Printed Names	of Person	nnel Collecting Data:	Abby Lya	n & Travist	Rillowe !	
Surveyor's Sig	nature:	Terria P 9/	e.oll	Date of Survey:	16-8-08	
Organization:_		2		Position: Fiele	16-8-08 161eu	

																		Disso	olved O	xygen		
		Name:					Waterbo				_	Site #:	7		-	Date:	10/8	/2008	<u>.</u>	Time:	13:	38
		ed Chanr					ight betw					nn on /	T01.0			D:	issolved	Oxygen:	8.06		(mg/L)	
	01	UTM X UTM X UTM X	16S024	4728	, Northin		Y), Hor UTM Y: UTM Y:		4065579 4065471	)	e ( <u>EPE</u> / -	+/- +/-	5	(meters)		D	issolved	Oxygen:	86		(% sat)	
		e Stream			3.5	•		(meters)			Survey S	Segment:			(meters)		Specif	ic Cond:	191		(μS/cm)	
	_	ermne Le			3.3			(meters)	•	_		m width)			(meters)	Wa	iter Tem	perature:	19.3		(°C)	
	Fie	ld Staff:	Abby L	ynn and	Travis H	owell (A	L & TH)	)						-								
			l		l		l		Ī	Tra	nsect C	ross-Se	ction		Ī		Ī		Ī			
	Distance	) <u>1</u>	Distance	2	0 Distance	3	Distance	4	Distance	)5 	Distance	)6 	Distance	)7 	Distance	)8 	Distance	)9 	Distance	0	1 Distance	1
Station	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0		0		0		0		0		0		0.45	0.09	0.36	0.05	0.41	0.08	0.36	0.0
2	0		0		0		0		0		0		0		0.9	0.12	0.72	0.07	0.82	0.14	0.72	0.
3	0		0		0		0		0		0		0		1.35	0.12	1.08	0.12	1.23	0.19	1.08	0.12
4	0		0		0		0		0		0		0		1.8	0.05	1.44	0.14	1.64	0.17	1.44	0.13
5	0		0		0		0		0		0		0		2.25	0.05	1.8	0.12	2.05	0.19	1.8	0.22
6	0		0		0		0		0		0		0		2.7	0.03	2.16	0.1	2.46	0.18	2.16	0.13
7	0		0		0		0		0		0		0		3.15	0.07	2.52	0.11	2.87	0.18	2.52	0.1
8	0		0		0		0		0		0		0		3.6	0.1	2.88	0.11	3.28	0.12	2.88	0.1
9	0		0		0		0		0		0		0		4.05	0.08	3.24	0.1	3.69	0.09	3.24	0.08
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5	0	3.6	0	4.1	0	3.6	0
Feature Type (riffle, run, or pool	D	ry	D	ry	D	ry	D	ry	D	rv	D	ry	Г	)ry	R	un	R	un	R	un	Rı	ın

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

	Surveyor's Signature:	Abigail L. Lvnn	Date:	10/8/2008
--	-----------------------	-----------------	-------	-----------

WBID#	3097
Site#	8

### Data Sheet B – Site Characterization (Page 1 of 3) (must be completed for each site)

Date & Time: 1						
Date & Tille.	18/08 13:	20	Location Des	cription (	e.g., road crossin	
Stream Name:	Ditch #6		Co Re	2 ?	72 Ups	fream
Current Weather C	Conditions:	Clear	Facility Name	e(s):	SSEX POU	rer Plant
Weather Condition	ns for Past 10 days:	Hacked	Permit Numb	er(s):	NO 0123	9273
, ,	Conditions at time of this					
No drought D; Pha	ase I □; Phase II □; Pha	ase III □; Phase	IV □; Unknown □			
Site Location:	DINATES (UNIVERSAL TE	ANSVERSE MER	CATOR PROJECTIO	N. IN MET	TERS)	
			TM Y): 406407	TT .	zontal Accuracy:	
1	(UTM X):16502441	· 1		7 (EPI	/ FOM / PDOP) zontal Accuracy:	
Site 11   Easting	(UTM X): <sub>16502441</sub>	Northing (U	TM Y): 406391		/ FOM / PDOP)	
hotos:	Dia ata Dayma a ga	Photo ID#	Photo Purpo	NCA.	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	FIIOIO ID#	r noto i ui pe		Thoto ID#	Thoto Turpose
						a grando despresa de como esta en escala
						D1 D
Photo ID#	Photo Purpose	Photo ID#	Photo Purpo	ose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpo	se	Photo ID#	Photo Purpose
						•
ses Observed*:	(Uses actually observed	d at the time of su	ırvey.)			
☐ Swimming	☐ Skin diving	□ SC	JBA diving	☐ Tub	ing	☐ Water skiing
☐ Wind surfing ☐ Kayaking		□ Воа	ating	☐ Wad	ding	☐ Rafting
		□ F:-1	nina	Non	e of the above	☐ Other:
☐ Hunting	│ □ Trapping	☐ Fisl	IIIIg	1101		

	Stream Name & WBI	D# Ditch;	#(	o 3	097		_ Date	of Surv	ey <u>10/8/08</u>	
	Site #	v							' /	
		Field Data Sh	eets	for Recreati	ional Us	e Stream	Surveys			
				– Site Chara						
Su	rrounding Conditio	ns*: (Mark all that pro	mote	or impede recreation	al uses. Atta	ch photos of ev	idence or unusual			
	☐ City/county parks	☐ Playgrounds		MDC conservat	ion lands	☐ Urba	n areas		Rural Residential	
	☐ Campgrounds	☐ State parks		National forests		☐ Natu	re trails		Stairs/walkway	
	☐ Boating accesses	☐ Fence		No trespass sign	L	Steep	slopes		Other:	
	Comments:	Fields								
Ev	idence of Human Us	Se*: (Attach photos an	d refer	rence in "Photos" se	ction.)					
	☐ Roads	☐ Foot paths/prin	ts	☐ Dock/platf	orm	☐ Campi	ng Sites	□ Ro	ope swings	
	☐ RV / ATV Tracks	☐ Fire pit/ring		☐ NPDES D	ischarge	☐ Fishing	g Tackle	□ Li	vestock Watering	
¥	None of the above Comments / Other:									
Su	bstrate*: (These values s	hould add up to 100%.)							1	
	% Cobble	% Gravel		O % Sand	20	% Silt	70 % Mu	d/Clay	% Bedrock	
Aq	juatic Vegetation*:	Note amount of vegetation		gal growth at the ass	sessment site.	)				
		The second secon								

Water Characteristics\*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	□ None	☐ Other:	
Color:	☐ Clear	☐ Green	☐ Gray	□ Milky	☐ Other:	1/1/
Bottom Deposit:	☐ Sludge	☐ Solids	☐ Fine sediments	□ None	☐ Other:	14 9
Surface Deposit:	□ Oil	□ Scum	☐ Foam	□ None	☐ Other:	

Data Sheet B Revised: December 19, 2007

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

	Stream Name & W		ets for Recreation			y <u>10/8/0</u> 8
A 1			B – Site Chara			
Add	Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)
Col	nments: (Please reco	ord any additional comments here	e.)			
	L	ly - nons	2			

Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.

Printed Names of Personnel Collecting Data: Asigni Upan + Isasis Hove!

Surveyor's Signature: August Turn Date of Survey: 10/8/08

Organization: Position: Position: Alal Manager

																	Dissolved Oxygen  Date: 10/8/2008 Time:					
		Name:							3097			Site #:	8			Date:	10/8/	/2008		Time:	13:	:20
		ed Chant					ight betw									Di	ssolved	Oxygen:	Dry		(mg/L)	
		ution - I UTM X UTM X					l Y), Hor UTM Y: UTM Y:					+/- +/-	5	(meters)		Di	ssolved	Oxygen:	Dry		(% sat)	
		e Stream				•		(meters)			_	Segment:			(meters)		Specif	ic Cond:	Dry		_(μS/cm)	
		ermne Le			21)			(meters)		-	-	n width)	100		(11100015)	Wa	ter Temp	perature:	Dry		(°C)	
	Fie	ld Staff:	Abby L	ynn and	Travis H	owell (A	L & TH	)														
			1		1		1		ı	Tra	nsect C	ross-Sec	ction									
	(	)1	0	)2	0	3	0	4	0	5	0	6	0	7	0	8	0	9	1	10	1	1
Station	Distance (m)	Depth (m)		Depth (m)		Depth (m)		Depth (m)		Depth (m)	Distance (m)	Depth (m)		Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)		Depth (m)	Distance (m)	Depth (m)
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0		0		0		0		0		0		0		0		0		0	
2	0		0		0		0		0		0		0		0		0		0		0	
3	0		0		0		0		0		0		0		0		0		0		0	
4	0	l	0		0		0		0		0		0		0		0		0		0	
5	0	I	0		0		0		0		0		0		0		0		0		0	
6	0	I	0		0		0		0		0		0		0		0		0		0	
7	0		0		0		0		0		0		0		0		0		0		0	
8	0	l	0		0		0		0		0		0		0		0		0		0	
9	0		0		0		0		0		0		0		0		0		0		0	
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type																						
(riffle run or pool	Г	)rv	I D	rv	I D	rv	I D	rv	I D	rv	I D	rv	l D	rv	D	rv	l D	rv	I D	)rv	I D	rv

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

	Surveyor's Signature:	Abigail L. Lvnn	Date:	10/8/2008
--	-----------------------	-----------------	-------	-----------

WBID#	3097
Site#_	9

Date & Time: 10808	2:59	Location Des	cription (e.g., road crossi	ng):					
Stream Name:	2	Hwy	2 Downstream						
Current Weather Conditions:	lear	Facility Name	e(s): Essex wwt	er Plant					
Weather Conditions for Past 10 days:	rached	Permit Numb	Facility Name(s): Essex wwt F Essex Power Plant Permit Number(s): MO 00 99 273 MO 01 23 447						
Official Drought Conditions at time of this									
No drought ; Phase I □; Phase II □; Pha	se III □; Phase I	V □; Unknown □							
Cita I andian									
Site Location:  LOCATION COORDINATES (UNIVERSAL TR	ANSVERSE MERO	EATOR PROJECTIO	N. IN METERS)						
			TT 1 A						
1650,4403		ГМ Y): <sub>4002255</sub>	Librizontal Accuracy	•					
Site 11 Easting (UTM X):	Northing (U	rm Y): 406209	3 (EPE) / FOM / PDOP						
hotos:	DI ( ID!!	Di -t - D	ose Photo ID#	Photo Purpose					
Photo ID# Photo Purpose	Photo ID#	Photo Purpo	SSE PHOTO ID#	rnoto rui posc					
Photo ID# Photo Purpose	Photo ID#	Photo Purpo		Photo Purpose					
Photo ID# Photo Purpose	Photo ID#	Photo Purpo	pse Photo ID#	Photo Purpose					
riloto ib# Tiloto i uipose	Thoto ID#	- I note i dipe	11000 12.11						
Ises Observed*: (Uses actually observed	at the time of su	rvey.)							
☐ Swimming ☐ Skin diving		JBA diving	☐ Tubing	☐ Water skiing					
☐ Wind surfing ☐ Kayaking	□ Boa	ting	☐ Wading	☐ Rafting					
☐ Hunting ☐ Trapping	☐ Fish	ing	None of the above	☐ Other:					
Describe: (Include number of individuals recreating.			tional uses, etc. Use Data Shee	t D- Recreational Use Interview					
	, I		,						
when conducting interviews.)									

	Stream Name & WE	IID# Ditch=	+6	)	309		Date	of Surve	ey 10/8/05
	Site#								, , , , , , , , , , , , , , , , , , , ,
		Field Data Sh	eets	for Recreat	ional Us	e Stream	Surveys		
		Company to the company of the Park of the Company o							
		Data Shee	t B –	Site Char	acteriza	tion (Page	e 2 of 3)		
Su	rrounding Condition	ons*: (Mark all that pro	mote or	impede recreation	nal uses. Atta	ch photos of ev	vidence or unusual	l items of	interest.)
	☐ City/county parks	☐ Playgrounds		IDC conservat	ion lands	☐ Urba	an areas		Rural Residential
	☐ Campgrounds	☐ State parks		ational forests		☐ Natı	are trails		Stairs/walkway
	☐ Boating accesses	☐ Fence	□N	o trespass sign	1	☐ Stee	p slopes		Other:
	Comments:	n Fields							
Ev	idence of Human U	Se*: (Attach photos ar	ıd refere	nce in "Photos" se	ection.)				
	□ Roads	☐ Foot paths/prin	ts	☐ Dock/plat	form	☐ Campi	ng Sites	□ Ro	pe swings
	☐ RV / ATV Tracks	☐ Fire pit/ring		☐ NPDES D	ischarge	☐ Fishing	g Tackle	☐ Liv	vestock Watering
	None of the above	Comments / Other:							
Su	<b>bstrate*:</b> (These values	should add up to 100%.)							
	% Cobble	% Gravel	10	> % Sand	ac	% Silt	70% Mu	d/Clay	% Bedrock
Aq	uatic Vegetation*:	(Note amount of vegetation	n or alga	al growth at the as	sessment site.	.)			
		•							
Wa	ater Characteristics	*: (Mark all that apply.)							
	Odor:	Sewage	ısky	☐ Chen	nical	None		ther:	
	Color:	Clear Gr	een	☐ Gray		□ Milky		ther:	
	Bottom Deposit: □	Sludge	lide	Fine	sediments	□ None		ther:	

☐ Foam

☑ Scum

Surface Deposit:

□ Oil

☐ Other:

□ None

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Site #		ets for Recreation	onal Use Stream	Surveys	
		B – Site Chara		·	
itional Stream M	Norphology: (Record iso		, -	•	ational uses.)
Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (
nments: (Please reco	ord any additional comments her	e.)			
None.	mostly	dry			

Printed Names of Personnel Collecting Data: Date of Survey: Surveyor's Signature: \_\_\_\_\_\_\_ Organization:

																		Disso	lved Ox	xygen		
Stream Name: Ditch # 6  Estimated Channel Incision: Dry (mage Stream Value of the control of the					-	Waterbo	ody ID:	3097			Site #:	9			Date:	10/8	/2008	_	Time:	12:	59	
	Estimat	ed Chanr	nel Incisi	on:	Dry	(m) (he	ight betw	een low	bank wid	dth and v	vater)					Di	issolved	Oxygen:	Dry		(mg/L)	
					, Northir				-		( <u>EPE</u> /	PDOP / 1	FOM)									
							UTM Y:		4062254		•	+/-		(meters)	•	Di	issolved	Oxygen:	Dry		(% sat)	
	11	UTM X	16S024	4049		•	UTM Y:		4062093	<b>i</b>	•	+/-	4	(meters)	•		Specif	ic Cond:	Dry		(μS/cm)	
	Average	e Stream	Width:		Dry			(meters)	L	ength of	Survey S	Segment:	150		(meters)		эрссп	ic Cona.	Diy		(μο/спі)	
	_								•	20x avera	-	-				Wa	ter Tem	perature:	Dry		(°C)	
	Fie	ld Staff:	Abby L	ynn and	Travis H	owell (A	L & TH)															
										Tra	nsect C	ross-Sec	ction									
	(	)1	0	)2	0	)3	0	4	(	)5	0	16	0	)7	0	18	(	9	1	.0	1	1
G:	Distance		Distance		Distance		Distance		Distance		Distance		Distance		Distance		Distance		Distance		Distance	
Station	(m)	Depth (m)		Depth (m)	(m)	Depth (m)		Depth (m)	(m)	Depth (m)	(m)	Depth (m)		Depth (m)	(m)	Depth (m)	(m)	Depth (m)		Depth (m)	(m)	Depth (m)
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0.18	0.03	0		0		0		0		0		0		0		0		0	
2	0		0.36	0.05	0		0		0		0		0		0		0		0		0	
3	0		0.54	0.06	0		0		0		0		0		0		0		0		0	
4	0		0.72	0.08	0		0		0		0		0		0		0		0		0	
5	0		0.9	0.08	0		0		0		0		0		0		0		0		0	
6	0		1.08				0		0		0		0		0		0		0		0	
7	0		1.26				0		0		0		0		0		0		0		0	
,	0						0		0		0		0		0		0		0		0	
δ	0		1.44				0		U		0		0		0		U		0		0	
9	0		1.62	0.04	0		0		0		0		0		0		0		0		0	
Right Bank	0	0	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type																						
(micol = m.m. = m.m. = 1	רו	)rv	D <sub>C</sub>	201	l n	rv	l D	rv.	ם ו	rv	ח	rs,	D	rs,	D	rs,	ח	rsz	D	rx,	D	rs,

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

	Surveyor's Signature:	Abigail L. Lvnn	Date:	10/8/2008
--	-----------------------	-----------------	-------	-----------

WBID# 3097 Site # \_\_\_\_\_\_\_

#### Field Data Sheets for Recreational Use Stream Surveys

	Date & 1	Гime:	10/6	0/08	16:0	2/	Location Desc	ription (	e.g., road crossi	ng):					
	Stream	Name	· Ditc	h#6			/	Upstream at Co Rd 780							
	Current	Weath	ner Conditio	ons: 760	elec	ur	Facility Name	Facility Name(s): Essex WWTF Essex Power Flant  Pormit Number(s): MO 0089 273							
Ī	Weather	Cond	litions for P	ast 10 days:	Lack	h	Permit Numbe	er(s):	40 008927.	3 47					
		_					DNR home page for								
	No droug	ght 🗵	; Phase I □	; Phase II □; Phas	se III 🗆	]; Phase									
0.	<b>4-1</b>	4!													
51	te Loca	tion: on co	ORDINATES	S (UNIVERSAL TRA	NSVEI	RSE MER	CATOR PROJECTION	, IN MET	TERS)						
	Site 01	T		X): <sub>16</sub> 5024398			TM Y): 4060787	Hori (EPI	zontal Accuracy // FOM / PDOF	r) 5 Weters					
	Site 11	East	ing (UTM	X): 165024398	Nor	thing (U	TM Y):4060616	Heri (EPI	zontal Accuracy J / FOM / PDOF						
Ph	otos:														
	Photo II	D#	Pho	to Purpose	Photo	) ID#	Photo Purpo	se	Photo ID#	Photo Purpose					
	262 Transe		t 11 tream	26	3	Transect 1 Downstrea	M								
			Pho	hoto Purpose Phot		) ID#	Photo Purpo	ose Photo ID#		Photo Purpose					
	Photo ID# Photo Purpose				Photo	ID#	Photo Purpo		Photo ID#	Photo Purpose					
Us	ses Observed*: (Uses actually observed				at the t	ime of s	urvey.)								
	☐ Swimming ☐ Skin diving					UBA diving	☐ Tub	ing	☐ Water skiing						
			☐ Kayaking		□ Во	ating	□ Wa	ding	☐ Rafting						
	☐ Hunt					☐ Fis	hing	Nor	ne of the above	☐ Other:					
	☐ Hunting ☐ Trapping  Describe: (Include number of individuals recreating when conducting interviews.)				photo-do	ocumentat	ion of evidence of recreat	ional uses,	etc. Use Data Shee	et D- Recreational Use Interview					

Stream Name & WBID	# Ditch=	#(	o E	097			Date o	of Surve	ey 18/2/08
Site #/									* *
	Field Data Sh	eets	for Recreat	onal Use	e Stream	Surve	evs		
	Data Shee	tB-	- Site Char	acteriza	tion (Page	e 2 of 3	)		
Surrounding Condition	S*: (Mark all that pro	mote o	r impede recreation	al uses. Atta	ch photos of ev	idence c	or unusual	items of	interest.)
☐ City/county parks	☐ Playgrounds		MDC conservat	on lands	☐ Urba	an area	S		Rural Residential
☐ Campgrounds	☐ State parks		National forests		☐ Natu	ıre trail	S		Stairs/walkway
☐ Boating accesses	☐ Fence		Vo trespass sign		☐ Stee	p slope	S		Other:
Comments:	m Field	,							
far	m tield	1							
Evidence of Human Us	<b>₽</b> *• (Attach photos an	d refer	ence in "Photos" se	ction.)					
□ Roads	☐ Foot paths/prin		☐ Dock/platf		☐ Campi	ng Site	s	□ Ro	pe swings
☐ RV / ATV Tracks	☐ Fire pit/ring		☐ NPDES D		☐ Fishing				vestock Watering
None of the above	Comments / Other:			<u> </u>					
Trong of the above									
Out of water in	11 11 . 1000()								
Substrate*: (These values show Cobble	% Gravel	7.	9 % Sand	76	% Silt	40	% Muc		% Bedrock
76 COODIE	70 Graver	/ .	70 Bana	<u> </u>	, o Sht	10	7011140		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
A die Wennstellende					`				
Aquatic Vegetation*: ()					)				
40-90	0% Filar	nln	wix a	ge					
					11.00		W-14-14		
Water Characteristics*	(Mark all that apply.)								
Odor: 🕱 S	ewage   Mu	ısky	☐ Chem	ical	□ None		□ Ot	ther:	
Color:	Clear 🗆 Gr	een	☐ Gray		☐ Milky		□ Ot	ther:	
Bottom Deposit: S	ludge □ So	lids	Fines	ediments	☐ None		□ Ot	ther:	

☐ Foam

🛛 Scum

Data Sheet B Revised: December 19, 2007

Surface Deposit:

□ Oil

☐ Other:

□ None

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Stream Name & W	BID#	#6	5097	Date of Surve	y 10/2/08
Site #	-				
	Field Data She	ets for Recreation	nal Use Stream	Surveys	
	Data Chaot I	D Cita Chara	otorization (Dec	· 2 af2)	
	Data Sneet I	B – Site Chara	<b>cterization</b> (Pag	ge 3 of 3)	
itional Stream M	orphology: (Record iso	lated pools or other featu	res identified during the		
Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)
ments: (Please reco	rd any additional comments her	e.)			
11					
None					
nlete.	u have completed all				
ed Names of Perso	nnel Collecting Data: _	Abby Ly	nn + Tro	avis Howel	/
eyor's Signature: _	alimo La	yun '	Date of Survey	1: 10/2/08	
nization:E	nnel Collecting Data: _  Align La		Position: Zi	eld nan	ar of the second
				,	v

																		Disso	lved Ox	xygen		
	Stream 1	Name:	Ditch #	6		ı	Waterbo	ody ID:	3097			Site #:	10			Date:	10/2/	2008		Time:	16:	:01
	Estimate	ed Chanr	nel Incisi	on:	0.5	(m) (hei	ght betw	een low l	bank wid	lth and w	rater)					Di	ssolved	Oxygen:	8 82	•	(mg/L)	
			•	UTM X),	, Northin	•	* *				( <u>EPE</u> /	PDOP / I	FOM)								(1118/12)	
		UTM X UTM X				i	UTM Y: UTM Y:		4060787 4060615			+/-		(meters) (meters)		Di	ssolved	Oxygen:	91.4		(% sat)	
	11	UIMA	103024.	3701			JIWI I.		4000013			1/-	0	(meters)			Specifi	ic Cond:	242.6		(μS/cm)	
					4.5		(	(meters)		ength of		-	150	(	meters)		_					
	(To dete	ermne Le	ngth of I	Reach)					(2	0x avera	ge strean	n width)				Wa	ter Temp	perature:	16.7		(°C)	
	Fiel	ld Staff:	Abby L	ynn and T	Travis H	owell (A	L & TH)															
										Trar	nsect Cı	ross-Sec	ction									
	0	)1	0	)2	0	3	0	4	0	5	0	6	0	7	0	8	0	9	1	0	1	1
ation	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0.13	0.02	0.31	0.02	0.16	0.09	0.48	0.09	0.45	0.1	0.5	0.13	0.47	0.13	0.53	0.1	0.49	0.05	0.52	0.13
2	0		0.26	0.04	0.62	0.04	0.32	0.21	0.96	0.18	0.9	0.16	1	0.12	0.94	0.19	1.06	0.15	0.98	0.05	1.04	0.24
3	0		0.39	0.06	0.93	0.03	0.48	0.23	1.44	0.22	1.35	0.15	1.5	0.14	1.41	0.2	1.59	0.18	1.47	0.06	1.56	0.25
4	0		0.52	0.07	1.24	0.05	0.64	0.25	1.92	0.21	1.8	0.15	2	0.15	1.88	0.21	2.12	0.2	1.96	0.05	2.08	0.31
5	0		0.65	0.04	1.55	0.07	0.8	0.25	2.4	0.23	2.25	0.17	2.5	0.15	2.35	0.19	2.65	0.22	2.45	0.04	2.6	0.3
6	0		0.78	0.05		0.07	0.96	0.24	2.88	0.23		0.19		0.13	2.82				2.94	0.02	3.12	0.2
7	0		0.91	0.06		0.07		0.19		0.21		0.2	3.5	0.13	3.29			0.15			3.64	0.17
8	0		1.04	0.05		0.08	1.28	0.15	3.84	0.2	3.6	0.18	4	0.09	3.76				3.92	0.05	4.16	
Š	0		1.17									0.14	4.5									

4.5

Run

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

0

1.6

Run

4.8

0

Run

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

3.1

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

Run

All measurements to be taken to the nearest 0.01 meter.

1.3

Run

0

Dry

Right Bank

Feature Type

(riffle, run, or pool

	Surveyor's Signature: Abigail L. Lynn	Date:	10/2/2008
--	---------------------------------------	-------	-----------

Run

4.7

Run

5.3

Run

0

4.9

Run

5.2

Run

0

0

WBID#	3097
Site#	The same of the sa

		3	/	*									
Date &	Time:	10/2	08 /	512	8			e.g., road cross					
Stream	Name	" Dit	ch #6			1			RJ 784				
Current	Weath	ner Conditi	ons: 760	cle	ar	Facility Name	e(s): حج	ex Power	Dlant				
Weathe	r Cond	litions for I	Past 10 days:		Α		Permit Number(s): MO 0089 2 13 MO 0123447						
						DNR home page fo	IR home page for "drought"):						
No drou	ght 🎾	; Phase I □	l; Phase II □; Pha	se III 🗆	∃; Phase	IV □; Unknown □							
<b>L</b>													
Site Loca			CATHAIN FEDERATE TED	ANGVE	OCE MED	CATOR PROJECTIO	N. IN MET	PD'C)					
								zontal Accuracy	/: 				
Site 01	East	ing (UIM	X): <sub>1/0</sub> 50243914	Nor	thing (U	TM Y): <sub>4058</sub> 99 /	(ERE	/ FOM / PDOI	P) ( Meters				
Site 11	East	ing (UTM	X):/650243911	Nor	thing (U	TM Y): <sub>4/05883</sub> (	Horiz	ontal Accuracy / FOM / PDOF					
	J		/4-0213/11	<i></i>		70000		,, 1 0111, 12 02					
hotos:								T					
Photo I	D#	Pho	to Purpose	Photo	D#	Photo Purpo		Photo ID#	Photo Purpose				
260	260 Transect			2	61	Transcet	11						
	200 Downstream					NP3 (YES)							
Photo I	Photo ID# Photo Purpose				ID#	Photo Purpo	Photo Purpose		Photo Purpose				
Photo II	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose				
L	I							<u> </u>					
Jses Obse	erved	!*: (Uses a	actually observed	at the t	ime of su	ırvey.)							
☐ Swin	nming		☐ Skin diving		☐ SCI	UBA diving	☐ Tubi	ng	☐ Water skiing				
☐ Wind	☐ Wind surfing ☐ Kayaking				□Воа	ating	□ Wad	ing	☐ Rafting				
☐ Hunt	ing		☐ Trapping		☐ Fish	ning	None	e of the above	☐ Other:				
Describe:	(Includ		** -	photo-do			the of recreational uses, etc. Use Data Sheet D- Recreational Use Interview						
when cond	ucting i	nterviews.)											

Stream Name & WBID # _	Vitch #6	3097	Date of Survey 10/2/0
Site #	,		/ /

#### Data Sheet B – Site Characterization (Page 2 of 3)

urrounding Condition	ons*: (Mark all that pr	omote or imped	le recreational uses. Attac	ch photos of ev	ridence or unusua	I items of in	nterest.)
☐ City/county parks	☐ Playgrounds		conservation lands	□ Urba			Rural Residential
☐ Campgrounds	☐ State parks	☐ Nation	al forests	☐ Natu	re trails		Stairs/walkway
☐ Boating accesses	☐ Fence	☐ No tres	spass sign	☐ Stee	p slopes		Other:
Comments:	m fields						
vidence of Human U	Jse*: (Attach photos a	nd reference in	"Photos" section.)				
□ Roads	☐ Foot paths/prin	ts 🗆 D	ock/platform	☐ Campi	ng Sites	☐ Rop	e swings
☐ RV / ATV Tracks	☐ Fire pit/ring		PDES Discharge	☐ Fishing	; Tackle	□ Live	estock Watering
None of the above	Comments / Other:						
ubstrate*: (These values	should add up to 100%.)					······	
% Cobble	% Gravel	25	% Sand 25	% Silt	50 % Mu	d/Clay	% Bedrock
quatic Vegetation*:					,		
ater Characteristics	v	V	<u> </u>				
Odor:	Sewage	ısky	☐ Chemical	□ None	□ 0	ther:	
Color:	Clear	een	□ Gray	☐ Milky	<u> </u>	ther:	
Bottom Deposit: □	Sludge □ So	lids	Fine sediments	□ None	□ o	ther:	
Surface Deposit:	Oil Sc	ım	☐ Foam	□ None	ΠО	ther:	

Data Sheet B Revised: December 19, 2007

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

C1 177 /	Distance from		res identified during the		
Channel Feature	access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth
			and the same of th		
None					

																		Disso	lved O	xygen		
	Stream 1	Name:	Ditch #	6			Waterbo	ody ID:	3097			Site #:	11			Date:	10/2	/2008		Time:	15:	28
			nel Incisio				ght betw									Di	issolved	Oxygen:	14.59		(mg/L)	
	01	UTM X	Easting (1 16S0243	3917	, Northin	1	UTM Y:		4058991		e ( <u>EPE</u> /	+/-	6	(meters)	i	Di	issolved	Oxygen:	181.4		(% sat)	
			16S0243	3910			UTM Y:		4058836		•	+/-		(meters)			Specif	ic Cond:	233		(μS/cm)	
	_	e Stream ermne Le	Width: ength of F	Reach)	6			(meters)		_		Segment: n width)	150		(meters)	Wa	iter Tem	perature:	25		(°C)	
	Fiel	d Staff:	Abby Ly	ynn and	Travis H	owell (A	L & TH)	ı														
										Trai	nsect C	ross-Sec	ction									
	0	1	0	2	0	3	0	4	0	5	0	)6	0	7	0	18	O	)9	1	0	1	1
Station	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.73	0.15	0.62	0.09	0.5	0.13	0.52	0.06	0.61	0.11	0.5	0.1	0.52	0.15	0.49	0.13	0.53	0.17	0.51	0.13	0.52	0.1
2	1.46	0.24	1.24	0.12	1	0.11	1.04	0.23	1.22	0.12	1	0.24	1.04	0.13	0.98	0.14	1.06	0.19	1.02	0.18	1.04	0.2
3	2.19	0.29	1.86	0.1	1.5	0.08	1.56	0.25	1.83	0.12	1.5	0.23	1.56	0.1	1.47	0.13	1.59	0.19	1.53	0.17	1.56	0.19
4	2.92	0.34	2.48	0.11	2	0.03	2.08	0.21	2.44	0.09	2	0.18	2.08	0.1	1.96	0.1	2.12	0.18	2.04	0.13	2.08	0.1
5	3.65	0.29	3.1	0.1	2.5	0.07	2.6	0.23	3.05	0.11	2.5	0.16	2.6	0.1	2.45	0.12	2.65	0.18	2.55	0.1	2.6	0.1
6	4.38	0.31	3.72	0.09	3	0.1	3.12	0.25	3.66	0.22	3	0.17	3.12	0.05	2.94	0.16	3.18	0.21	3.06	0.1	3.12	0.19
7	5.11	0.31	4.34	0.14	3.5	0.11	3.64	0.25	4.27	0.2	3.5	0.17	3.64	0.02	3.43	0.2	3.71	0.22	3.57	0.13	3.64	0.13
8	5.84	0.19	4.96	0.11	4	0.12	4.16	0.21	4.88	0.15	4	0.17	4.16	0.04	3.92	0.15	4.24	0.21	4.08	0.14	4.16	0.1:
9	6.57	0.1	5.58	0.08	4.5	0.06		0.14		0.14	4.5	0.12	4.68	0.09	4.41	0.08		0.16		0.12		0.09
Right Bank	7.3	0	6.2	0	5	0	5.2	0	6.1	0	5	0	5.2	0	4.9	0	5.3	0	5.1	0	5.2	0

Run

Run

Run

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

Run

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

Run

All measurements to be taken to the nearest 0.01 meter.

Run

Run

Feature Type

(riffle, run, or pool

	Surveyor's Signature: Abigial L. Lynn	Date:	10/2/2008
--	---------------------------------------	-------	-----------

Run

Run

Run

Run

Date & T	ime:	12/2	1									
		10/2	08	15,0	)7	Location Description (e.g., road crossing):						
Stream I	Vame	· D	itch #c	<u></u>		Downs-	92					
Current '	Weath	er Conditio	ons:	1	car	Facility Name	(s): Es	sex white	enflant			
Weather	Cond	itions for P	ast 10 days:	tack	en	Permit Numbe	Permit Number(s). MO 0123447					
	_						"drough	t''):				
No droug	ght 🏹;	Phase I □	; Phase II □; Phas	se III 🗆	; Phase I	V □; Unknown □						
		ORDINATES	S (UNIVERSAL TR	ANSVER	SE MERO	ATOR PROJECTION	I. IN MET	ERS)				
Site 01							Horiz (EPH	contal Accuracy / FOM / PDOP	) 6 Meters			
Site 11					thing (U	ГМ Y): <sub>ЦО</sub> 57228	Horiz EPE					
otos:												
Photo II	)#	Pho	to Purpose	Photo	ID#	-	se	Photo ID#	Photo Purpose			
258 Transpert Downstream			29	59		W						
Distance Primage				Photo	тр#	Photo Purpos	ze.	Photo ID#	Photo Purpose			
Photo ID# Photo Pulpose				THOTO	ID#	Thoto Tarpo.		11000 == 11	1			
Photo ID# Photo Purpose				Photo	ID#	Photo Purpos	se	Photo ID#	Photo Purpose			
es Obse	ervec	<b>!*:</b> (Uses <u>a</u>	actually observed	at the ti	me of su	ırvey.)						
☐ Swim		☐ Skin diving		□ SCU	JBA diving	□ Tub	ing	☐ Water skiing				
□ Wind	surfi	ng	☐ Kayaking		□ Boa	ting	□ Wad	ling	☐ Rafting			
☐ Hunti	ng		☐ Trapping				/		☐ Other:			
Describe:	(Includ		individuals recreating,	photo-do	cumentatio	on of evidence of recreat	ional uses,	etc. Use <i>Data Shee</i>	t D- Recreational Use Interview			
	Current V Weather Official I No droug  te Locat LOCATIO Site 01 Site 11  otos: Photo II Photo II Photo II  Photo II  Wind Hunti Describe:	Current Weath Weather Cond Official Droug No drought \$\overline{\pi};\$  te Location: Location Co Site 01	Weather Conditions for P Official Drought Condition No drought ; Phase I :  te Location: LOCATION COORDINATE: Site 01	Current Weather Conditions:  Weather Conditions for Past 10 days: Official Drought Conditions at time of this No drought A; Phase I D; Phase II D; Phase  te Location: Location: Location Coordinates (UNIVERSAL TRANSITE OF T	Current Weather Conditions:  Weather Conditions for Past 10 days:  Official Drought Conditions at time of this survey No drought A; Phase I \( \); Phase II \( \); Phase III \( \); Phase III \( \); Phase III \( \); Phase III \( \)  te Location:  Location:  Location Coordinates (Universal transversible)  Site 01	Current Weather Conditions:  Weather Conditions for Past 10 days:  Official Drought Conditions at time of this survey (search I No drought F; Phase I I ; Phase II I; Phase III II; Phase III I	Current Weather Conditions:  Current Weather Conditions for Past 10 days:  Weather Conditions for Past 10 days:  Official Drought Conditions at time of this survey (search DNR home page for No drought ; Phase I ; Phase II ; Phase III ; Phase IV ; Unknown    te Location:  Loc	Current Weather Conditions:  Weather Conditions for Past 10 days:  Weather Conditions for Past 10 days:  Weather Conditions for Past 10 days:  Weather Conditions at time of this survey (search DNR home page for "drough No drought II; Phase II II; Phase III II; Phase III II; Phase IV II; Unknown III  LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN MET Hotel)  Site 01	Current Weather Conditions:  Weather Conditions for Past 10 days:  Weather Conditions for Past 10 days:  Official Drought Conditions at time of this survey (search DNR home page for "drought"):  No drought #; Phase I   ; Phase II   ; Phase III   ; Phase IV   ; Unknown    te Location:  LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)  Site 01			

Stream Name & WBID # _	Ditch #6	3097	Date of Survey <u>10/2/8</u> 分
Site # / 2			

#### **Data Sheet B – Site Characterization** (Page 2 of 3)

Surrounding Cond	ditions*: (Mark a	ll that promote o	r impede recreations	ıl uses. Atta	ch photos of ev	idence or unusua	l items of i	interest.)			
☐ City/county par	rks 🛮 🗆 Playgr	ounds 🗆 1	MDC conservation	on lands	☐ Urba	n areas		Rural Residential			
☐ Campgrounds	☐ State p	arks 🗆 1	National forests		☐ Natu	re trails		Stairs/walkway			
☐ Boating access	es	1	No trespass sign		☐ Stee	slopes		Other:			
Comments:	m Field	٧									
Evidence of Huma	an Use*: (Attach	photos and refer	ence in "Photos" sec	tion.)							
☐ Roads	☐ Foot pa	ths/prints	☐ Dock/platfo	rm	☐ Campi	ng Sites	☐ Roj	pe swings			
□ RV / ATV Trac	cks	ring	☐ NPDES Dis	charge	☐ Fishing	g Tackle	☐ Liv	restock Watering			
None of the about	ove Comments /	Other:									
4											
Substrate*: (These v	Substrate*: (These values should add up to 100%.)  % Cobble % Gravel >>> % Sand 20 % Silt <0 % Mud/Clay % Bedrock										
7,0 00001	,,,,,	<i>&gt;</i>									
Aquatic Vegetatio	n* Note amount of	vegetation or als	ral arouth at the asse	ecement cite	)						
	ong stra					,e					
Water Characteris	tics*: (Mark all th	at apply.)									
Odor:	☐ Sewage	□ Musky	☐ Chemi	cal	None	ΠО	ther:				
Color:	Clear	☐ Green	☐ Gray		☐ Milky	ΠО	ther:				
Bottom Deposit:	☐ Sludge	☐ Solids	Fine se	diments	□ None		ther:				
Surface Deposit:	□ Oil	□ Scum	☐ Foam		None	□ 0	ther:				

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Site#			3097		* /
	Field Data She	ets for Recreatio	nal Use Stream	Surveys	
	Data Sheet	B – Site Chara	<b>cterization</b> (Pag	ge 3 of 3)	
dditional Stream M	orphology: (Record is	olated pools or other featu	res identified during the	survey that may support recre	eational uses.)
Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)
				-	
omments: (Please reco	rd any additional comments he	ге.)			
10					
Nane					

Plea complete.

Printed Names of Personnel Collecting Data: \_Date of Survey: \_\_ Surveyor's Signature:

Organization:

																		Disso	olved Ox	xygen		
		Name:									-	Site #:	12			Date:	10/2/	/2008		Time:	15:	07
		ed Chanr				•	ight betw									D	issolved	Oxygen:	15.4		(mg/L)	
		cation - l			, Northir	•	Y), Hor UTM Y:		ccuracy 4057381		e ( <u>EPE</u> /	PDOP / 1 +/-		(meters)		D	issolved	Oxygen:	194		(% sat)	
		UTM X					UTM Y:		4057228	3	-	+/-		(meters)			Specif	ic Cond:	205		(μS/cm)	
	_	e Stream ermne Le			5.5			(meters)		ength of 20x avera		Segment: n width)	150		(meters)				26.1		(°C)	
	Fie	ld Staff:	Abby L	ynn and	Travis H	owell (A	L & TH)	1						<u>-</u>								
			ı							Tra	nsect C	ross-Se	ction									
	Distance	)1	Distance	12	Distance	3	Distance	4	Distance	)5	Distance	)6 I	Distance	)7 I	Distance	)8 	Distance	9 I	1 Distance	0	1 Distance	1
Station	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m)	(m)	Depth (m
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0		0		0		0		0		0		0		0.51	0.07	0		0.59	0.1
2	0		0		0		0		0		0		0		0		1.02				1.18	0.12
3	0		0		0		0		0		0		0		0		1.53		0		1.77	0.12
4	0		0		0		0		0		0		0		0		2.04		0		2.36	0.11
5	0		0		0		0		0		0		0		0		2.55		0		2.95	0.09
6	0		0		0		0		0		0		0		0		3.06				3.54	0.08
7	0		0		0		0		0		0		0		0		3.57		0		4.13	0.11
8	0		0		0		0		0		0		0		0		4.08				4.72	0.14
9	0		0		0		0		0		0		0		0		4.59				5.31	0.13
Right Bank Feature Type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1	0	0	0	5.9	0
(riffle, run, or pool	Г	ry	D	ry	D	ry	D	ry	D	ry	D	ry	D	ry	D	ry	Po	ool	D	ry	Po	ol

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Surveyor's Signature. Adigan L. Lynn Date. 10/2/20	Surveyor's Signature: Abigail L. Lvnn	Date:	10/2/2008
--	---------------------------------------	-------	-----------

	Date & 1	Гime:	10/2	108	14	151			e.g., road crossi	Phys.					
	Stream	Name	· D; 4	ch #G			Downs		net Hu						
	Current	Weath	er Conditio	ons: 760	c/l	ear	Facility Name	e(s):	SSEX WWT SSEX PAU MODO89	en Plant					
	Weather	Cond	itions for P	ast 10 days:	Efrica)	he	Permit Numb	MO0123447							
								NR home page for "drought"):							
	No droug	ght 🖄 ;	Phase I	; Phase II □; Pha	se III 🗆	]; Phase I	IV □; Unknown □								
0.	d 1	4 =													
SI	te Loca		ORDINATES	S (UNIVERSAL TR.	ANSVEI	RSE MERO	EATOR PROJECTIO	N, IN MET	ERS)						
	Site 01	East	ing (UTM	X): <sub>/6502</sub> 43786	Nor	thing (U	ГМ Y): <sub>40</sub> 55 79.	Hori	zontal Accuracy FOM / PDOI						
	Site 11			X): <sub>165024377</sub>		Northing (UTM Y): 4055640 (EPE) FOM / PDOP) Meters									
Ph	Photos:  Photo ID# Photo Purpose Photo ID# Photo Purpose Photo ID# Photo Purpose														
	Photo II	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	Photo Purpose		Photo Purpose					
	250 Transect Downstream				25	7	Transect 11 Dipofream								
									Photo ID#	Dista Disease and					
	Photo II	D#	Pho	to Purpose	Photo	) ID#	Photo Purpo	Photo Purpose		Photo Purpose					
					ı										
	Photo II	D#	Pho	to Purpose	Photo	ID#	Photo Purpo	se	Photo ID#	Photo Purpose					
										•					
	0.1		lde or r			• •	`								
US 				actually observed	at the t				in a	☐ Water skiing					
	☐ Swin			☐ Skin diving			JBA diving	☐ Tub							
	□ Wind	l surfii	ng	☐ Kayaking		☐ Boa	ting	□ Wao		☐ Rafting					
	☐ Hunt			☐ Trapping		☐ Fish			e of the above	Other:					
			le number of i nterviews.)	ndividuals recreating,	photo-do	ocumentatio	on of evidence of recrea	t∳ónal uses,	etc. Use Data Shee	et D- Recreational Use Interview					

Stream Name & WBID# Di+ch +6	3097	Date of Survey	17/2/08
Site# 13			/

#### Data Sheet B – Site Characterization (Page 2 of 3)

Su	urrounding Conditio	ons*: (Mark all the	at promote o	or impede recreatio	nal uses. Atta	ich photos of ev	ridence or unusua	l items of	interest.)			
	☐ City/county parks	☐ Playgroun	ds 🔲 ]	MDC conservat	tion lands	□ Urba	n areas		Rural Residential			
	☐ Campgrounds	☐ State park	s 🗆 1	National forests	3	☐ Natu	re trails		Stairs/walkway			
	☐ Boating accesses	☐ Fence		No trespass sign	n	☐ Stee	p slopes		Other:			
	Comments:	+ far	W.	Eields	>							
Ev	Evidence of Human Use*: (Attach photos and reference in "Photos" section.)											
	☐ Roads	☐ Foot paths/j	prints	☐ Dock/plat	form	☐ Campi	ng Sites	☐ Ro	pe swings			
	☐ RV / ATV Tracks	☐ Fire pit/ring	3	☐ NPDES D	ischarge_	☐ Fishing	g Tackle	☐ Liv	vestock Watering			
	None of the above	Comments / Oth	er:									
Su	Substrate*: (These values should add up to 100%.)											
	% Cobble	% Grave	el 4	O % Sand	20	) % Silt	4/0 % Mu	d/Clay	% Bedrock			
Αq	Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site.)											
Wa	ater Characteristics	*: (Mark all that ap	oply.)									
	Odor:	Sewage	l Musky	☐ Chen	nical	□ None		ther:	$\bigcap$			
	Color:	Clear $\square$	l Green	☐ Gray		☐ Milky	□ o	ther:				
	Bottom Deposit:	Sludge $\square$	Solids	☐ Fine	sediments	□ None	□ O	ther:				
	Surface Deposit:	Oil 🗆	Scum	☐ Foam	ı	□ None	□о	ther:	, ,			

<sup>\*</sup>This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Stream Name & WBID#_	Ditch #6	3897	Date of Survey 10/2/08
Site# 1.3			, ,

**Data Sheet B – Site Characterization** (Page 3 of 3)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m
ments: (Please reco	rd any additional comments here	e.)	1149		
THE STREET (Treate feet					
	- None				
	- None				
	- None				
	- None				

Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.

Printed Names of Personnel Collecting Data:	you of Travis Howell
A21	10/1
Surveyor's Signature:	Date of Survey:/ 0/2/08
Organization: ERC	Position: Field Manager

																		Disso	lved O	xygen		
		Name:					Waterbo					Site #:	13			Date:	10/2/	2008		Time:	14	:51
	Estimat	ed Chanr	nel Incisi	on:	Dry	(m) (he	ight betw	een low	bank wic	lth and w	vater)					Di	ssolved	Oxygen:	Dry		(mg/L)	
		cation - l UTM X			, Northir		( Y), Hori UTM Y:		ccuracy 4055795		e ( <u>EPE</u> /	PDOP / 1 +/- +/-		(meters)		Di	ssolved	Oxygen:	Dry		(% sat)	
	11	UTM X	16S024	3779		-	UTM Y:		4055640	1		+/-	5	(meters)			Specif	ic Cond:	Dry		(μS/cm)	
	_	e Stream ermne Le			Dry			(meters)	•	-	Survey S ge strear	Segment: n width)	150		(meters)	Wa	-	erature:			(°C)	
	Fie	ld Staff:	Abby L	ynn and	Гravis Н	owell (A	L & TH)	1						,								
										Trai	nsect C	ross-Sec	ction									
		)1		2		3	0	4		5		6		7		8		9		10		1
Station	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
Left Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0		0		0		0		0		0		0		0		0		0		0	
2	0		0		0		0		0		0		0		0		0		0		0	
3	0		0		0		0		0		0		0		0		0		0		0	
4	0		0		0		0		0		0		0		0		0		0		0	
5	0		0		0		0		0		0		0		0		0		0		0	
6	0		0		0		0		0		0		0		0		0		0		0	
7	0		0		0		0		0		0		0		0		0		0		0	
9	0		0		0		0		0		0		0		0		0		0		0	
Right Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feature Type	_		_		_	-	_		_		_		_		_		_		_	-	_	
(riffle, run, or pool	D	ry	l D	ry	l D	ry	D	ry	l D	ry	l D	ry	l D	ry	l D	ry	l D	ry	l D	ry	l D	ry

Notes: Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.1 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Surveyors Signature. Adigan L. Lynn Date. 10/2/20	Surveyor's Signature:	Abigail L. Lynn	Date:	10/2/2008
---	-----------------------	-----------------	-------	-----------



















































